INDEXES TO THE JOURNAL OF THE AMERICAN CERAMIC SOCIETY

INCLUDING ADVANCED CERAMIC MATERIALS AND COMMUNICATIONS

compiled by

The American Ceramic Society

VOLUME 75, 1992

AUTHOR INDEX TO THE JOURNAL OF THE AMERICAN CERAMIC SOCIETY INCLUDING ADVANCES IN CERAMICS AND COMMUNICATIONS

Numbers in parentheses refer to *monthly* issue of the *Journal*; numbers following are *page* numbers.

Abe, Yoshihiro See Hosono, Hideo; Lee, Won-Hyuk

Abe, Yoshiyuki; Kakegawa, Kazuyuki; and Sasaki, Yoshinori
Synthesis of compositionally homogeneous $Sr(Cu_xZn_{1-x})_{1/2}W_{1/2}O_3$. (1) 234

Abelard, Pierre See Blanchart, Phillippe

Abouaf, Marc See Besson, Jacques

Adachi, Keisuke See Fukuda, Koichiro

Adendorff, Keith T.; de Villiers, Johan P. R.; and Kruger, Gert J.
Crystal structures of $Ca_3Cr_3O_{12}$ and $Ca_3Cr_2SiO_{12}$, the chromium analogs of silicocarnotite. (6) 1416

Adjaottor, Albert A.; and Griffin, Gregory L.
Aerosol synthesis of aluminum nitride powder using metalorganic reactants. (12) 3209

Adschiri, Tadafumi; Kanazawa, Katsuhito; and Arai, Kunio
Rapid and continuous hydrothermal crystallization of metal oxide particles in supercritical water. (4) 1019; Rapid and continuous hydrothermal synthesis of boehmite particles in subcritical and supercritical water. (9) 2615

Agarwala, Mukesh K.; Bourell, David L.; and Persad, Chadee
Synthesis of high-T_c dual-phase Ag–$YBa_2Cu_3O_{7-x}$ superconductor composite powders by sol–gel process. (7) 1975

Aggarwal, Ishwar D. See Ewing, Kenneth J.

Ajayan, Pulickel M.; and Iijima, Sumio
Sintering of confined silica in oxidized silicon particles. (4) 999

Akbar, Sheikh A. See Birkefeld, Lora D.

Akhtar, M. Kamal; Pratsinis, Sotiris E.; and Mastrangelo, Sebastian V. R.
Dopants in vapor-phase synthesis of titania powders. (12) 3408

Aksay, Ilhan A. See Bergström, Lennart

Alary, Jean-André See Mottet, Bruno

Albaugh, Kevin B.; Rasmussen, Don H.
Rate processes during anodic bonding. (10) 2644

Aldao, Celso M. See Castro, Miriam S.

Alexander, Kathleen B. See Bleier, Alan

Allaire, Claude
Refractory lining for alumina electrolytic cells. (8) 2308

Allan, Marita See Sugama, Toshifumi

Allavena, Marcel See Silvi, Bernard

Amar, Elisabeth See Hild, François

Amarakoon, Vasantha R. W. See Brooks, Keith G.

Anderson, Harlan U. See Howard, Scott A.; Tai, Lone-Wen

Ando, Akihiro See Hanada, Teiichi

Andrievskaya, Elena R.; and Lopato, Lidiya M.
Phase equilibria in the system HfO_2–Y_2O_3–CaO. (11) 3026

Angel, Paul W.; and Hann, Raiford E.
Glass formation, properties and structure of soda–yttria–silica glasses. (12) 3278

Annamalai, V. E.; Sornakumar, T.; Gokularathnam, C. V.; and Krishnamurthy, R.
Transformations during grinding of ceria-stabilized tetragonal zirconia polycrystals. (9) 2559

Antolin, Stanislav See Nagelberg, Alan S.

Antolin, Stanislav; Nagelberg, Alan S.; and Creber, David K.
Formation of Al_2O_3/metal composites by the directed oxidation of molten aluminum–magnesium–silicon alloys: Part I, Microstructural development. (2) 447

Arai, Kunio See Adschiri, Tadafumi

Araki, Yasushi See Hirano, Shin-ichi

Arashi, Haruo
Pressure-induced phase transformation of HfO_2. (4) 844

Argyriou, Dimitri N.; and Vance, Eric R.
Retrograde densification of calcined and glass precursors of approximate $(Bi,Pb)_2Sr_2Ca_2Cu_3O_{10}$ stoichiometry. (5) 1269

Arita, Irene H.; Wilkinson, David S.; and Purdy, Gary R.
Crystallization of yttria–alumina–silica glasses. (12) 3315

Arlt, Gottfried
Editorial comments on two papers by Wilhelm R.Buessem, L. Eric Cross, and Amiya K. Goswami. (11) 2930

Aselage, Terry L.; and Tissot, Ralph G.
Lattice constants of boron carbides. (8) 2207

Ashcroft, Ian A.; Lawrence, Charles W.; Weihs, Timothy P.; and Derby, Brian
In situ measurement of the elastic moduli of glass-ceramic thick films. (5) 1284

Awano, Masanobu; Takagi, Hiroyoshi; and Kuwahara, Yoshitaka
Grinding effects on the synthesis and sintering of cordierite. (9) 2535

Azad, Abdul M. See Birkefeld, Lora D.

Bain, Debra See Martin, Steve W.

Bakis, George See Halloran, John W.

Balmer, Mari Lou; Lange, Fred F.; and Levi, Carlos G.
Metastable phase selection and partitioning in ZrO_2–MgO processed from liquid precursors. (4) 946

Ban, Takayuki; and Okada, Kiyoshi
Structure refinement of mullite by the Rietveld method and a new method for estimation of chemical composition. (1) 227

Bando, Yoshio See Kikuchi, Masao

Bao, Gan-g See Sudre, Olivier

Baran, George R.; Roques-Carmes, Claude; Wehbi, Dahloul; and Degrange, Michel
Fractal characteristics of fracture surfaces. (10) 2687

Barber, James R. See Cho, Chongdu

Barnes, Mary W.; Klimkiewicz, Maria; and Brown, Paul W.
Hydration in the system Ca_2SiO_4–$Ca_3(PO_4)_2$ at 90°C. (6) 1423

Barsoum, Michel See Elkind, Alexander

Bartek, Alena; Ekström, Thommy; Herbertsson, Harald; and Johansson, Thomas
Yttrium α-sialon ceramics by hot isostatic pressing and post-hot isostatic pressing. (2) 432

Bateman, Charles A.; and Notis, Michael R.
Coarsening kinetics in Mg(Ca,Ti,Y)-partially-stabilized zirconias. (6) 1566

Bateman, Charles A.; Zhang, Lijie; Chan, Helen M.; and Harmer, Martin P.
Mechanism for the peritectic reaction and growth of aligned grains in $YBa_2Cu_3O_{6+x}$. (5) 1281

Bauer, Robert A. See Kruis, Frank Einar

Baura-Peña, M. P.; Martínez-Lope, M. J.; and García-Clavel, M. E.
Synthesis of magnesium dititanate. (7) 1978

Becher, Paul F. See Bleier, Alan

Becher, Paul F.; and Swain, Michael V.
Grain-size-dependent transformation behavior in polycrystalline tetragonal zirconia. (3) 493

Behrens, Gesa; and Heuer, Arthur H.
Microstructural characterization of cofired tungsten-metallized high-alumina electronic substrates. (10) 2815

Bellosi, Alida See Tampieri, Anna

Bender, Barry A.; Jessen, Todd L.; and Lewis, David, III
Optimization of the mechanical properties of silicon carbide-fiber-reinforced zirconia titanate matrix composites through controlled processing. (6) 1628

Bennison, Stephen J. See Braun, Linda M.

Bény, Jean-Michel See Mottet, Bruno

Berger, Axel See Seifert, Andreas

Bergna, Horacio See Saltzberg, Michael A.

Bergström, Lennart; Schilling, Christopher H.; and Aksay, Ilhan A.
Consolidation behavior of flocculated alumina suspensions. (12) 3305

Berkowski, Marek; Bowen, Paul; Liechti, Thomas; and Scheel, Hans Jörg
Plasma-sprayed-yttria layers for corrosion resistance. (4) 1005

Berta, Yolande See Brooks, Keith G.; Wang, Hongyu

Besmann, Theodore M. See Sheldon, Brian W.; Vahlas, Constantin

Besmann, Theodore M.; Sheldon, Brian W.; Moss, Thomas S., III; and Kaster, Michael D.
Depletion effects of silicon carbide deposition from methyltrichlorosilane. (10) 2899

Besson, Jacques; and Abouaf, Marc
Rheology of porous alumina and simulation of hot isostatic pressing. (8) 2165

Beyerle, Douglas S.; Spearing, S. Mark; and Evans, Anthony G.
Damage mechanisms and the mechanical properties of a laminated 0/90 ceramic/matrix composite. (12) 3321

Beyerle, Douglas S.; Spearing, S. M.; Zok, Frank W.; and Evans, Anthony G.
Damage and failure in unidirectional ceramic-matrix composites. (10) 2719

Bhalla, Amar See Markgraf, Steven A.; Prasadarao, Alamanda V.

Bhatt, Hemanshu; Donaldson, Kimberly Y.; Hasselman, D. P. H.; and Bhatt, Ramakrishna T.
Role of interfacial carbon layer in the thermal diffusivity/conductivity of silicon carbide fiber-reinforced reaction-bonded silicon nitride matrix composites. (2) 334

Bhatt, Ramakrishna T.
Oxidation effects on the mechanical properties of a SiC-fiber-reinforced reaction-bonded Si_3N_4 matrix composite. (2) 406; See also Bhatt, Hemanshu

Bhattacharya, Arun K.
In situ ductile toughening of Nb_2Al by combustion synthesis. (6) 1678
Bhattacharya, Arun K.; and Petrovic, John J.
R-curve behavior in zirconia-reinforced molybdenum disilicide composites. (1) 23
Bhattacharya, Arun K.; Petrovic, John J.; and Danforth, Stephen C.
Indentation method for determining the macroscopic fracture energy of brittle bimaterial interfaces. (2) 413
Bilger, Serge; Syskakis, Emmanuel; Naoumidis, Aristides; and Nickel, Hubertus
Sol–gel synthesis of strontium-doped lanthanum manganite. (4) 964
Billy, Michel See Veyret, Jean-Bernard
Birkefeld, Lora D.; Azad, Abdul M.; and Akbar, Sheikh A.
Carbon monoxide and hydrogen detection by anatase modification of titanium dioxide. (11) 2964
Blackburn, Stuart; and Lawson, Toni A.
Mullite–alumina composites by extrusion. (4) 953
Blanchard, Cheryl R.; and Page, Richard A.
Grain boundary sliding microdisplacement measurements during the creep of alumina. (6) 1612
Blanchart, Philippe; Blaumard, Jean François; and Abelard, Pierre
Effects of yttrium doping on the grain and grain-boundary resistivities of $BaTiO_3$ for positive temperature coefficient thermistors. (5) 1068
Blaszkiewicz, Michael See Chen, Jayu
Blaumard, Jean François See Blanchart, Philippe
Bleier, Alan; Becher, Paul F.; Alexander, Kathleen B.; and Westmoreland, C. Gary
Effect of aqueous processing conditions on the microstructure and transformation behavior in Al_2O_3–$ZrO_2(CeO_2)$ composites. (10) 2649
Blendell, John E. See Hill, Michael D.
Bless, Stephan J.; Brar, N. Singh; Kanel, Gennady; and Rosenberg, Zvi
Failure waves in glass. (4) 1002
Bohac, Petr See Suzuki, Ryosuke O.
Boilot, Jean-Pierre See Renoult, Olivier
Bonen, David
Composition and appearance of magnesium silicate hydrate and its relation to deterioration of cement-based materials. (10) 2904
Bors, Susan L. See Saltzberg, Michael A.
Bourell, David L. See Agarwala, Mukesh K.
Bowen, H. Kent See Nahass, Paul
Bowen, Paul See Berkowski, Marek
Bowman, Keith J. See Lee, Farnjeng; Sandlin, Michael S.
Brabston, W. Newell See Roy, Amitava
Bradt, Richard C. See Dey Debashis
Brar, N. Singh See Bless, Stephan J.
Braun, Linda M.; Bennison, Stephen J.; and Lawn, Brian R.
Objective evaluation of short-crack toughness curves using indentation flaws: Case study on alumina-based ceramics. (11) 3049
Bremer, Ulrich See Bruley, John
Brennan, John J.; and Nutt, Steven R.
SiC-whisker-reinforced glass-ceramic composites: Interfaces and properties. (5) 1205
Breval, Else; and Johnson, William B.
Microstructure of platelet-reinforced ceramics prepared by the directed reaction of zirconium with boron carbide. (8) 2139
Brewer, David N. See Calomino, Anthony M.
Brooks, Keith G.; Berta, Yolande; and Amarakoon, Vasantha R. W.
Effect of Bi_2O_3 on impurity ion distribution and electrical resistivity of Li-Zn ferrites. (11) 3065
Brown, Paul Wencil
Phase relationships in the ternary system CaO-P_2O_5-H_2O at 25°C. (1) 17; See also Barnes, Mary W.; Fulmer, Mark; Martin, Roger I.; Sample, David
Brown, Sherman D. See Chen, Zhong-jia
Brownlow, Darryl L. See Inniss, Daryl
Brulely, J. See Szabó, D. V.
Bruley, John; Bremer, Ulrich; and Krasevec, Viktor
Chemistry of basal plane defects in zinc oxide–antimony oxide (0.1 mol%) ceramics. (11) 3127
Brun, Milivoj K.
Measurement of fiber/matrix interfacial shear stress at elevated temperatures. (7) 1914
Brungard, Nancy L. See Zdaniewski, Wieslaw A.
Bucko, Miroslaw, M. See Haberko, Krzysztof
Budhwani, Karim See Martin, Steve W.
Buessem, W. R.; Cross, L. E.; and Goswami, A. K.
Phenomenological theory of high permittivity in fine-grained barium titanate. (11) 2923; Effect of two-dimensional pressure on the permittivity of fine-grained barium titanate. (11) 2927
Buijs, Maarten; and Martens, Liesan A. A. G.
Effect of indentation interaction on cracking. (10) 2809
Buntin, Thomas See Ulmer, Gene C.
Burns, S. J.; Dahake, Girish; Ding, Zhong; Kudallur, Suresh; Kumar, Sujeet; Li, Kangjie; Srinivasan, Ramakrishnan; Stack, Ken; Venkataraman, Natarajan; Wang, Chuan; Yang, Fuqian; and Zhou, Yiyang
A Grüneisen relation on constant-pressure lines. (12) 3341
Busca, Guido See Mazza, Daniele
Butt, Darryl P.; Tressler, Richard E.; and Spear, Karl E.
Corrosion of SiC materials in N_2–H_2–CO gaseous environments: I, Thermodynamics and kinetics of reactions. (12) 3257; Corrosion of SiC materials in N_2–H_2–CO gaseous environments: II, Durability and mechanical properties. (12) 3268
Cable, Michael See Frade, Jorge R.
Cai, Hongda; Faber, K. T.; and Fuller, Edwin R., Jr.
Crack bridging by inclined fibers/whiskers in ceramic composites. (11) 3111
Calhoun, Clyde L. See Janney, Mark A.
Callahan, Daniel L.; and Thomas, Gareth
Convergent beam electron diffraction analysis of lattice shifts in aluminum nitride. (5) 1092
Calomino, Anthony M.; and Brewer, David N.
Controlled crack growth specimens for brittle systems. (1) 206
Campbell, G. H. See Szabó, D. V.
Cannon, W. Roger See Rao, Shyam S.
Cantalini, Carlo; and Pelino, Mario
Microstructure and humidity-sensitive characteristics of α-Fe_2O_3 ceramic sensor. (3) 546
Cao, Lihua See Zhang, Jinsong
Carlson, William B. See Zheng, Jingmin
Carroll, Douglas R.; and Dharani, L. R.
Effect of temperature on the ultimate strength and modulus of whisker-reinforced ceramics. (4) 786
Carter, C. Barry See Norton, M. Grant; Summerfelt, Scott R.; Susnitzky, David W.; Tietz, Lisa A.
Castro, Miriam S.; Nuñez, Guillermo M.; Resasco, Daniel E.; and Aldao, Celso M.
Prebreakdown conduction in ZnO varistors. (4) 800
Catalan, Antonio B.; Mantese, Joseph V.; Micheli, Adolph L.; Schubring, Norm W.; and Wong, Curtis A.
Effects of sintering temperature and time on grain size and dielectric constant of potassium tantalum niobate films. (11) 3007
Cavin, O. Burl See Martin, M. Hogan E.; Srinivasan, Ram
Cawley, James D. See Chen, Andrea Y.; LaRosa, Judith L.; Nixon, Thomas D.
Cesarano, Joseph, III See Moore, Katherine A.
Chadwick, Margaret M.; Wilkinson, David S.; and Dryden, John R.
Creep due to a non-Newtonian grain boundary phase. (9) 2327
Chaim, Rachman
Microstructure and bending strength in the ternary (Mg,Ca)-partially-stabilized zirconia. (3) 694
Chaim, Rachman; and Heuer, Arthur H.
Crystallization in a barium-containing magnesium aluminosilicate glass-ceramic. (6) 1512
Chaklader, Asoke C.D.; Gupta, Sankar Das; Lin, Edmond C. Y.; and Gutowski, Boris
Al_2O_3–SiC composites from aluminosilicate precursors. (8) 2283
Chakraborty, Akshoy K.
Resolution of thermal peaks of kaolinite in thermomechanical analysis and differential thermal analysis studies. (7) 2013
Chambers, Robert S.
Numerical integration of the hereditary integrals in a viscoelastic model for glass. (8) 2213
Chan, Chen-Feng; and Ko, Yung-Chao
Effect of Cr_2O_3 on slag resistance of Al_2O_3–SiO_2 refractories. (10) 2857
Chan, Chin Jong; Kriven, Waltraud M.; and Young, J. Francis
Physical stabilization of the $\beta \rightarrow \gamma$ transformation in dicalcium silicate. (6) 1621
Chan, Helen M. See Bateman, Charles A.; French, Jonathan D.; Harmer, Martin P.; Kbasgiwale, Niranjan; Padture, Nitin P.; Russo, Charles J.
Chan, Kwai S.; and Page, Richard A.
Origin of the creep-crack growth threshold in a glass–ceramic. (3) 602
Chandler, David See Halloran, John W.
Chandrasekar, Srinivasan See Hebbar, Rajadasa R.
Chao, Luen-Yuan; and Shetty, Dinesh K.
Extreme-value statistics analysis of fracture strengths of a sintered silicon nitride failing from pores. (8) 2116
Chaput, Frédéric See Renoult, Olivier
Chase, Mark See Kahn, Manfred
Chen, Andrea Y.; and Cawley, James D.
Extrusion of α-Al_2O_3–boehmite mixtures. (3) 575
Chen, Fueng-Ho; Koo, Horng-Show; and Tseng, Tseung-Yuen
Characteristics of the high-T_c superconducting Bi-Pb-Sr-Ca-Cu oxides derived from an ethylenediaminetetraacetic acid precursor. (1) 96
Chen, I-Wei See Chen, Pei-Lin; Liu, Shih-Yu; Sheu, Tzer-Shin; Wu, Xin; Xue, Liang A.
Chen, I-Wei; and Hwang, Shyh-Lung
Shear thickening creep in superplastic silicon nitride. (5) 1073
Chen, Jayu; Xu, Qi Chang; Blaszkiewicz, Michael; Meyer, Richard, Jr.; and Newnham, Robert E.
Lead zirconate titanate films on nickel–titanium shape memory alloys: SMARTIES. (10) 2891
Chen, Jong; Tian, Qiang; and Virkar, Anil V.
Phase separation in the SiC–AlN pseudobinary system: The role of coherency strain energy. (4) 809
Chen, K. C. See Pak, Sung S.
Chen, Pei-Lin; and Chen, I-Wei
In-situ alumina/aluminate platelet composites. (9) 2610
Chen, Yan Ling; and Stevens, Ronald
2223 phase formation in Bi(Pb)-Sr-Ca-Cu-O: I, The role of chemical composition. (5) 1142; 2223 phase formation in Bi(Pb)-Sr-Ca-Cu-O: II, The role of temperature–reaction mechanism. (5) 1150; 2223 phase formation in Bi(Pb)-Sr-Ca-Cu-O: III, The role of atmosphere. (5) 1160
Chen, Zhien-Chi; Ring, Terry A.; and Lemaître, Jacques
Stabilization and processing of aqueous $BaTiO_3$ suspension with polyacrylic acid. (12) 3201
Chen, Zhong-jia; Wirtz, Gerald P.; and Brown, Sherman D.
Chemical kinetic calculations of the gas phase in filament-assisted chemical vapor deposition of diamond. (8) 2107
Cheng, Humin; Ma, Jiming; Zhao, Zhenguo; Qiang, Di; Li, Yongxiang, and Yao, Xi
Hydrothermal synthesis of acicular lead titanate fine powders. (5) 1123
Cheng, Si; Lloyd, Isabel K.; and Kahn, Manfred
Modification of surface texture by grinding and polishing lead zirconate titanate ceramics. (8) 2293
Cheng, Weili; and Finnie, Iain
A prediction of the strength of glass following the formation of subsurface flaws by scribing. (9) 2565
Cheong, Deock-Soo; and Sanders, William A.
High-temperature deformation and microstructural analysis for silicon nitride–scandium(III) oxide. (12) 3331
Chevalier, Jean-Pierre See Luo, Jian Shu
Chiang, Chwan K. See Hill, Michael D.
Chiang, Yet-Ming; Takagi, Touichi
Interfacial segregation in perovskites: I-IV—comment. (7) 2017
Chigusa, Hisashi See Tatsumisago, Masahiro
Chiou, Bi-Shiou; and Chung, Ming-Chih
Effect of copper additive on the microstructure and electrical properties of polycrystalline zinc oxide. (12) 3363
Cho, Chongdu See Holmes, John W.
Cho, Chongdu; Holmes, John W.; and Barber, James R.
Distribution of matrix cracks in a uniaxial ceramic composite. (2) 316
Choi, Gyeong Man See Jang, Se-Aug
Choi, Hyun-Suk See Yoo, Han-Ill
Choi, Kyoon See Park, Sang-Yeup
Choi, Sung R.; Salem, Jonathan A.; and Sanders, William A.
Estimation of crack closure stresses for in situ toughened silicon nitride with 8 wt% scandia. (6) 1508
Chon, Uong See Tsai, Jing-Fong
Chou, Yeong-Shyung; and Green, David J.
Silicon carbide platelet/alumina composites: I, Effect of forming technique on platelet orientation. (12) 3346
Chou, Ye T. See Wang, Zhanyi
Choudhary, Manoj K.
Mathematical modeling of flow and heat-transfer phenomena in glass furnace channels and forehearths—correction. (4) 1038
Choudhury, Ashok See Potter, Gregg E.
Christensen, Bruce J.; Mason, Thomas O.; and Jennings, Hamlin M.
Influence of silica fume on the early hydration of portland cements using impedance spectroscopy. (4) 939
Christoffersen, Roy; and Davies, Peter K.
Structure of commensurate and incommensurate ordered phases in the system $ZrTiO_4$–$Zr_5Ti_7O_{24}$. (3) 563
Chu, Fan; Sun, Hong-Tao; Zhang, Liang-Ying; and Yao, Xi
Temperature dependence of ultra-low-frequency dielectric relaxation of brium titanate ceramic. (11) 2939
Chuang, Tze-jer; and Fuller, Edwin R., Jr.
Extended Charles–Hillig theory for stress corrosion cracking of glass. (3) 540
Chung, Ming-Chih See Chiou, Bi-Shiou
Chung, Shyan-Lung; Sheu, Yu-Cheng; and Tsai, Ming-Shyong
Formation of SiO_2, Al_2O_3, and $3Al_2O_3 \cdot 2SiO_2$ particles in a counterflow diffusion flame. (1) 117
Cinibulk, Michael K.; Thomas, Gareth; and Johnson, Sylvia M.
Fabrication and secondary-phase crystallization of rare-earth disilicate–silicon nitride ceramics. (8) 2037; Oxidation behavior of rare-earth disilicate–silicon nitride ceramics. (8) 2044; Strength and creep behavior of rare-earth disilicate–silicon nitride ceramics. (8) 2050

Clark, David E. See Lodding, Alexander R.
Clarke, David R.
Interpenetrating phase composites. (4) 739
Compton, Robert N. See Dai, Sheng
Conner, Trent G. See Mackert, J. Rodway, Jr.
Cook, Robert F. See Tandon, Rajan
Cormack, Alastair N. See Dwivedi, Anurag
Corman, Gregory S.
Creep of beryllia single crystals. (1) 71; Creep of 6H α-silicon carbide single crystals. (12) 3421
Coutures, Jean Pierre See Gervais, Monique
Coutures, Juliette See Gervais, Monique
Cracknell, Kathryn P. B. See Norton, M. Grant
Creber, David K. See Antolin, Stanislav
Cross, L. Eric See Buessem, W. R.; Hiremath, Basavaraj V.; Kumar, Umesh
Curtin, William A. See Heredia, Fernando E.
Cutler, Raymond A. See Sathyamoorthy, Rengaswamy
Cutler, Raymond A.; Reynolds, James R.; and Jones, Aaron
Sintering and characterization of polycrystalline monoclinic, tetragonal, and cubic zirconia. (8) 2173
Cutler, Raymond A.; Rigtrup, Kevin M.; and Virkar, Anil V.
Synthesis, sintering, microstructure, and mechanical properties of ceramics made by exothermic reactions. (1) 36
Dahake, Girish See Burns, S. J.
Dai, Sheng; Compton, Robert N.; Young, Jack P.; and Mamantov, Gleb
Preparation of C_{70}-doped solid silica gel via sol–gel process. (10) 2865
Damodaran, Alathoor Damodaran See Warrier, Krishna Gopa Kumara
Dando, Neal See Stebbins, Jonathan F.
Danforth, Stephen C. See Bhattacharya, Arun K.; Pechenik, Alexander
Daryluk, Steven See Park, Dong Soo
D'Arco, Philippe See Silvi, Bernard
Darroudi, Taghi; Hellmann, John R.; Tressler, Richard E.; and Gorski, Lynn
Strength evaluation of reaction-bonded silicon carbide radiant tubes after long-term exposure to combustion and endothermic gas ambients. (12) 3445
Date, Sadgopal K. See Deshpande, Subhash B.
Dauskardt, Reinhold H.; James, M. R.; Porter, J. R.; and Ritchie, R. O.
Cyclic fatigue-crack growth in a SiC-whisker-reinforced alumina ceramic composite: Long- and small-crack behavior. (4) 759
Davies, Peter K. See Christoffersen, Roy
Davis, Burtron H. See Srinivasan, Ram
Davis, Robert F. See Nixon, Robert D.
Degrange, Michel See Baran, George R.
DeGuire, Mark R. See Roth, Don J.
Deki, Shigehito See Hashimoto, Noboru
DeLeeuw, David
Effects of joining pressure and deformation on the strength and microstructure of diffusion-bonded silicon carbide. (3) 725
deLorenzi, Horst G. See Will, Fritz G.
Deobald, Lyle R.; and Kobayashi, Albert S.
Dynamic fracture characterization of Al_2O_3 and SiC_w/Al_2O_3. (10) 2867
Derby, Brian See Ashcroft, Ian A.
Deshpande, Subhash B.; Potdar, Hari S.; Godbole, Prakash D.; and Date, Sadgopal K.
Preparation and ferroelectric properties of SBN:50 ceramics. (9) 2581
Desu, Seshu B.; and Payne, David A.
Interfacial segregation in perovskites: I-IV—reply. (7) 2020
Dève, Hervé E. See Emiliani, Mario L.
DeVries, Robert C.
Editorial comments on a paper by Rustum Roy. (11) 2933
Dey, Debashis; and Bradt, Richard C.
Grain growth of ZnO during Bi_2O_3 liquid-phase sintering. (9) 2529
de Villiers, Johan P. R. See Adendorff, Keith T.
de Villiers, Johan P. R.; and Muan, Arnulf
Liquidus-solidus phase relations in the system CaO–CrO–Cr_2O_3–SiO_2. (6) 1333
Dharani, L. R. See Carroll, Douglas R.
DiCarlo, James A. See Morscher, Gregory N.
Dickerson, Robert M.; and Heuer, Arthur H.
The calcia–zirconia phase diagram revisited: Stability of the ordered phases ϕ_1 and ϕ_2—reply. (3) 733; The calcia–zirconia phase diagram revisited: Stability of the ordered phases ϕ_1 and ϕ_2—reply—correction. (6) 1712
Dieckmann, Rüdiger See Subramanian, Ramesh
DiGregorio, John F.; and Furtak, Thomas E.
Analysis of residual stress in 6H-SiC particles within Al_2O_3/SiC composites through Raman spectroscopy. (7) 1854
Dimos, Duane B. See Garg, Diwakar
Ding, Zhong See Burns, S. J.
Dingwell, Donald B.
Density of Ga_2O_3 liquid. (6) 1656
Dixit, Ravindra S. See Weimer, Alan W.
Di Maggio, Rosa See Scardi, Paolo
Dolhert, Leonard E. See Roth, Don J.
Dollar, Anna See Steif, Paul S.
Donaldson, Kimberly Y. See Bhatt, Hemanshu; Hasselman, D. P. H.; Ruh, Robert
Dondur, Vesna See Takalčec, Emilija
Dongliang, Jiang; Jihong, She; and Shouhong, Tan
Strengthening of silicon carbide ceramics by surface nitridation during hot isostatic pressing. (9) 2586
Dosaka, Kenji See Sato, Tsugio
Doty, M. E. See Kingery, W. D.
Douy, André See Jaymes, Isabelle
Drew, Robin A. L. See Hampton, J. Holly D.; Muscat, Daniel
Drofenik, Miha
Initial morphology and grain growth in donor-doped barium titanate. (9) 2383
Drummond, James L.
Effects of in vitro aging on magnesia-stabilized zirconia. (5) 1278
Dryden, John R. See Chadwick, Margaret M.
Du, Yong; Jin, Zhanpeng; and Huang, Peiyun
Thermodynamic calculation of the zirconia–calcia system. (11) 3040
Duggan, D. M. See Pak, Sung S.
Dukino, Rodney D.; and Swain, Michael V.
Comparative measurement of indentation fracture toughness with Berkovich and Vickers indenters. (12) 3299
Dumbaugh, William H.; and Lapp, Josef C.
Heavy-metal oxide glasses. (9) 2315
Dungan, Denis F. See Micheli, Adolph L.
Dunmead, Stephen D.; Munir, Zuhair A.; and Holt, J. Birch
Temperature profile analysis in combustion synthesis: I. Theory and background. (1) 175; Temperature profile analysis in combustion synthesis: II, Experimental observations. (1) 180
Dufan, Pedro; Recio, Paloma; and Rodriguez, Juan M.
The calcia–zirconia phase diagram revisited: Stability of the ordered phases ϕ_1 and ϕ_2—comment. (3) 731
Dutta, I.; Mitra, S; and Rabenberg, L.
Oxidation of sintered aluminum nitride at near-ambient temperatures. (11) 3149
Dutton, Rollie E.; and Rahaman, Mohamed N.
Sintering, creep, and electrical conductivity of model glass-matrix composites. (8) 2146
Dwivedi, Anurag; Rodriguez, Mark A.; and Cormack, Alastair N.
Defect-chemical aspects in the synthesis of metallic conductors $La_{1-x}Ba_xCuO_3$ (x = 0.0 to 0.5). (7) 1993
Dyer, Paul N. See Garg, Diwakar
Dyrlie, Oddvar See Norby, Truls
Eagles, Dana See Halloran, John W.
Eaton, Harvill C. See Roy, Amitava
Ekelund, Magnus; and Forslund, Bertil
Carbothermal preparation of silicon nitride: Influence of starting material and synthesis parameters. (3) 532
Ekström, Thommy See Bartek, Alena
Ekström, Thommy; and Nygen, Mats
SiAlON ceramics. (2) 259; SiAlON ceramics—correction. (8) 2312
Elkind, Alexander; Barsoum, Michel; and Kangutkar, Pramod
Thermal expansion of silicon carbide monofilaments and silicon carbide–borosilicate composites. (10) 2871
Elliott, William Crawford See Ulmer, Gene C.
Ellison, Adam J. G.; and Navrotsky, Alexandra
Enthalpy of formation of zircon. (6) 1430
Emiliani, Mario L.; and Dève, Hervé E.
Assessment of oxide debond coatings for metal-toughened intermetallics. (7) 1935
Emmerling, Andreas See Fricke, Jochen
Engström, E. Urban See Lodding, Alexander R.
Erickson, Edwin S., Jr. See Ulmer, Gene C.
Ecans, Anthony G. See Beyerle, Douglas S.; Heredia, Fernando E.; Sudre, Olivier
Evans, Julian R. G. See Kostić, Branko; Zhang, Tao
Ewing, Kenneth J.; Jaganathan, James; Peitersen, Laura; Aggarwal, Ishwar D.; Sommers, James A.; and Fahey, Jeff V.
Radiotracer study of the preparation of high-purity lanthanum fluoride. (6) 1562
Ewing, Kenneth J.; Wright, Barbara M.; Jaganathan, James; and Aggarwal, Ishwar D.
Distribution of oxide in a bed of thermally decomposed $ZrF_4 \cdot H_2O$ and its effect on ZrF_4 sublimation. (7) 1918
Ezis, Andre See Lin, Wai
Faber, K. T. See Cai, Hongda
Fahey, Jeff V. See Ewing, Kenneth J.
Fahrenholtz, William See Johnston, Gregory P.
Fairhurst, Carl W. See Mackert, J. Rodway, Jr.
Fajgelj, Aleš See Mitrič, Breda
Falk, Lena K. L.; and Rundgren, Kent
Microstructure and short-term oxidation of hot-pressed Si_3N_4/$ZrO(+Y_2O_3)$ ceramics. (1) 28
Fan, Bo See Sudre, Olivier
Fan, Chen-Lung; and Rahaman, Mohamed N.
Factors controlling the sintering of ceramic particulate composites: I, Conventional processing. (8) 2056
Fang, Tsang-Tse; and Hwang, Jiung-Bin
Structural instability and microstructural change of La^{3+}-doped M-type calcium ferrite. (4) 915
Farnan, Ian See Stebbins, Jonathan F.
Farris, Thomas N. See Hebbar, Rajadasa R.
Feller, Steven See Martin, Steve W.
Ferber, Mattison K.; and Jenkins, Michael G.
Evaluation of the strength and creep-fatigue behavior of hot isostatically pressed silicon nitride. (9) 2453
Ferreira, António R.; Furtado, Carlos S.; and Perdigão, João M.
Grain-boundary and grain electrical resistances in $Co_xFe_{3-x}O_4$. (6) 1708
Fett, Theo
Measurement of nonsymmetric creep in Al_2O_3 with a glass phase. (6) 1691
Fett, Theo; and Munz, Dietrich
Subcritical crack growth of macrocracks in alumina with *R*-curve behavior. (4) 958; Determination of fracture toughness at high temperatures after subcritical crack extension. (11) 3133
Finlayson, Trevor R. See Lim, Cheryl S.
Finnie, Iain See Cheng, Weili
First, Richard C.; and Heuer, Arthur H.
Deformation twinning in single-crystal monoclinic zirconia: A first report. (8) 2302
Fischman, Gary S. See Suttor, Daniel; Wang, Hongyu
Fisher, Edward S.; Manghnani, Murli H.; Wang, Ji-Fang; and Routbort, Jules L.
Elastic properties of Al_2O_3 and Si_3N_4 matrix composites with SiC whisker reinforcement. (4) 908
Fleischer, Maximilian; Meixner, Hans; and Tragut, Christian
Hole mobility in acceptor-doped, monocrystalline $SrTiO_3$. (6) 1666
Floch, Hervé G. See Parraud, Stephen
Folsom, Craig A.; Zok, Frank W.; Lange, Fred F.; and Marshall, David B.
Mechanical behavior of a laminar ceramic/fiber-reinforced epoxy composite. (11) 2969
Foltyn, Steve R. See Johnston, Gregory P.
Forslund, Bertil See Ekelund, Magnus
Fox, Dennis S. See Jacobson, Nathan S.
Frade, Jorge R.; and Cable, Michael
Reexamination of the basic theoretical model for the kinetics of solid-state reactions. (7) 1949
Freer, Robert See Owate, Israel O.
Freiman, Stephen W. See Wong-Ng, Winnie
French, Jonathan D.; Chan, Helen M.; Harmer, Martin P.; and Miller, Gary A.
Mechanical properties of interpenetrating microstructures: The Al_2O_3/c-ZrO_2 system. (2) 418
Fricke, Jochen; and Emmerling, Andreas
Aerogels. (8) 2027
Friebele, E. Joseph See Ruller, Jacqueline A.
Friel, John J. See Ulmer, Gene C.
Fu, Hengzhi See Zhou, Wancheng
Fu, Shen-Li See Ho, In-Chyuan
Fukuda, Koichiro See Maki, Iwao
Fukuda, Koichiro; Maki, Iwao; and Adachi, Keisuke
Structure change of Ca_2SiO_4 solid solutions with Ba concentration. (4) 884
Fukuda, Koichiro; Maki, Iwao; and Ito, Suketoshi
Remelting reaction within belite crystals during cooling. (10) 2896
Fukuda, Kousaku See Ogawa, Toru
Fukui, Toshimi See Okuyama, Masahiko
Fukunaga, Jiro See Wakasugi, Takashi
Fukunaga, Osamu See Nakano, Satoshi
Fulcher, Gordon S.
Analysis of recent measurements of the viscosity of glasses. (5) 1043
Fuller, Edwin R., Jr. See Cai, Hongda; Chuang, Tze-jer; Hill, Michael D.
Fulmer, Mark; and Brown, Paul W.
Low-temperature formation of fluorapatite in aqueous solution. (12) 3401
Funkenbusch, Paul D. See Tseng, Wenjea J.
Furtado, Carlos S. See Ferreira, António R.
Furuta, Atsushi See Oh, Ki-Young
Futak, Thomas E. See DiGregorio, John F.
Gamboa, Julio Andrade; and Pasquevich, Daniel M.
Effect of chlorine atmosphere on the anatase–rutile transformation. (11) 2934

Gan, Z. Z. See Wang, Qiang
García-Clavel, M. E. See Baura-Peña, M. P.
García-Ramos, Jose V. See Ocaña, Manuel
Garg, Diwakar; Dyer, Paul N.; Dimos, Duane B.; Sunder, Swaminathan; Hintermann, Hans E.; and Maillat, Michel
Low-temperature chemical vapor deposition tungsten carbide coatings for wear-erosion resistance. (4) 1008
Garino, Terry
Heterocoagulation as an inclusion coating technique for ceramic composite processing. (3) 514
Garofalini, Stephen H. See Zirl, David M.
Gauckler, Ludwig J. See Suzuki, Ryosuke O.
Geiger, Alan L. See Hasselman, D. P. H.
Gervais, Monique; Le Floch, Sylvie; Rifflet, Jean Claude; Coutures, Juliette; and Coutures, Jean Pierre
Effect of the melt temperature on the solidification process of liquid garnets $Ln_3Al_5O_{12}$ (Ln = Dy, Y, and Lu). (11) 3166
Giannakopoulos, Antonios E.; and Olsson, Mårten
Influence of the nonsingular stress terms on small-scale supercritical transformation toughness. (10) 2761
Glaeser, Andreas M. See Powers, James D.
Goat, Christopher See Hill, Robert G.
Godbole, Prakash D. See Deshpande, Subhash B.
Godin, Michael H. See Ritter, John E.
Goela, Jitendra S.; and Taylor, Raymond L.
Postdeposition process for improving optical properties of chemical-vapor-deposited silicon. (8) 2134
Gogotsi, Yury G.; Porz, Franz; and Yaroshenko, Viktor P.
Mechanical properties and oxidation behavior of Al_2O_3–AlN–TiN composites. (8) 2251
Gokularathnam, C. V. See Annamalai, V. E.
Gongyi, Guo; and Yuli, Chen
Effect of preparation methods and condition of precursors on the phase composition of yttria-stabilized zirconia powders. (5) 1294
Gorski, Lynn See Darroudi, Taghi
Goswami, A. K. See Buessem, W. R.
Graddy, G. E., Jr. See Weirauch, Douglas A., Jr.
Green, David J. See Chou, Yeong-Shyung; Marple, Basil R.; Orenstein, Robert M.
Green, Robert E., Jr. See Krynicki, Joseph W.
Griffin, Gregory L. See Adjaottor, Albert A.
Griffioen, Willem
Effect of nonlinear elasticity on measured fatigue data and lifetime estimations of optical fibers. (10) 2692
Griffiths, John R. See Lim, Cheryl S.
Grinspan, Paul See Têqui, Christophe
Grutzeck, Michael W. See LaRosa, Judith L.
Grutzeck, Michael W.; and Muan, Arnulf
Liquid-solid equilibria in the system FeO–NiO–Fe_2O_3–SiO_2. (6) 1342; Phase relations in the system iron oxide–NiO–SiO_2 under strongly reducing conditions. (6) 1351
Gruy, Frédéric; and Pijolat, Michèle
Kinetics of anatase TiO_2 surface area reduction in a mixture of HCl, H_2O, and O_2: I, Experimental study. (3) 657; Kinetics of anatase TiO_2 surface area reduction in a mixture of HCl, H_2O, and O_2: II, Quantitative modeling. (3) 663
Guiu, Frank; Li, Ming; and Reece, Michael J.
Role of crack-bridging ligaments in the cyclic fatigue behavior of alumina. (11) 2976
Guorong, Chen See Shaoqiu, Tang
Gupta, Sankar Das See Chaklader, Asoke C.D.
Gutowski, Boris See Chaklader, Asoke C.D.
Haber, Richard A. See Smith, Peter A.
Haberko, Krzysztof; Pyda, Waldemar; Piekarczyk, Jan; and Bucko, Miroslaw M.
Effect of carbon reduction on the properties of 13 mol% TiO_2–3 mol% Y_2O_3–84 mol% ZrO_2. (5) 1272
Haggerty, John S. See Sheldon, Brian W.
Hall, David A. See Wang, Hong-Wen
Halliyal, Arvind See Kumar, Umesh
Halloran, John W.; Hodge, James D.; Chandler, David; Klemptner, Lori Jo; Neal, Matthew; Parish, Mark; Park, Hyun; Pathare, Viren; Bakis, George; and Eagles, Dana
Fabrication and properties of high-temperature superconducting wire by the green-fiber method. (4) 903
Hallstedt, Bengt
Thermodynamic assessment of the system MgO–Al_2O_3. (6) 1497
Hampton, J. Holly D.; Savage, Stuart B.; and Drew, Robin A. L.
Experimental analysis of fine-particle migration during ceramic filtration processes. (10) 2726
Hanada, Teiichi; Ando, Akihiro; Tanabe, Setsuhisa; and Soga, Naohiro
Properties and network constitution of rf-sputtered amorphous films in the system silicon dioxide-aluminum orthophosphate. (12) 3417
Hanada, Teiichi; Kato, Yoshinari; Tanabe, Setsuhisa; and Soga, Naohiro
Preparation and physical properties of radiofrequency-sputtered amorphous films in the system $AlPO_4$–TiO_2. (9) 2335
Hann, Raiford E. See Angel, Paul W.
Hannachi, Yacine See Silvi, Bernard
Hansen, James D.; Rusin, Richard P.; Teng, Mao-Hua; and Johnson, D. Lynn
Combined-stage sintering model. (5) 1129
Harbour, John R.
Thermogravimetric analysis. (3) 507
Harmer, Martin P. See Bateman, Charles A.; French, Jonathan D.; Russo, Charles J.; Thompson, A. Mark; Wang, Zhanyi; Zhao, Junhong
Harmer, Martin P.; Chan, Helen M.; and Miller, Gary A.
Unique opportunities for microstructural engineering with duplex and laminar ceramic composites. (7) 1715
Harris, Daniel C.; Hayes, George A.; Jaeger, Nancy A.; Sawyer, Larry D.; Scheri, Richard C.; Hills, Marian E.; Hayes, Kenneth R.; Homer, Scot E.; Tsai, Y. L.; and Mecholsky, J. J., Jr.
Mechanical strength of hemispheric domes of yttria and lanthana-doped yttria. (5) 1247
Hart, Kaye P. See Mitamura, Hisayoshi
Hashimoto, Noboru; Yoden, Hiroyoshi; and Deki, Shigehito
Sintering behavior of fine aluminum nitride powder synthesized from aluminum polynuclear complexes. (8) 2098
Hashman, Thomas W.; and Pratsinis, Sotiris E.
Thermodynamics of vapor synthesis of AlN by nitridation of aluminum and its halides. (4) 920
Hasselman, D. P. H. See Bhatt, Hemanshu; Ruh, Robert
Hasselman, D. P. H.; Donaldson, Kimberly Y.; and Geiger, Alan L.
Effect of reinforcement particle size on the thermal conductivity of a particulate-silicon carbide-reinforced aluminum matrix composite. (11) 3137
Hauck, Jürgen
Pseudobinary phase relations of cuprates and their possible use as oxygen concentration cells. (6) 1434
Haung, Xuening See Sarkar, Partho
Hayes, George A. See Harris, Daniel C.
Hayes, Kenneth R. See Harris, Daniel C.
Hebbar, Rajadasa R.; Chandrasekar, Srinivasan; and Farris, Thomas N.
Ceramic grinding temperatures. (10) 2742
Hefetz, Meir; and Rokhlin, Stanislav I.
Thermal shock damage assessment in ceramics using ultrasonic waves. (7) 1839
Hellmann, John R. See Darroudi, Taghi
Hensley, David A. See Heo, Jong
Heo, Jong; Lam, David; Sigel, George H., Jr.; Mendoza, Edgar A.; and Hensley, David A.
Spectroscopic analysis of the structure and properties of alkali tellurite glasses. (2) 277
Herbertsson, Harald See Bartek, Alena
Heredia, Fernando E.; Spearing, S. Mark; Evans, Anthony G.; Mosher, Paul; and Curtin, William A.
Mechanical properties of continuous-fiber-reinforced carbon matrix composites and relationships to constituent properties. (11) 3017
Heuer, Arthur H.
Editorial comment on paper by W. D. Kingery *et al.* (3) 489; See also Behrens, Gesa; Chaim, Rachman; Dickerson, Robert M.; First, Richard C.; Shaw, Michael C.
Hild, François; Amar, Elisabeth; and Marquis, Didier
Stress heterogeneity effect on the strength of silicon nitride. (3) 700
Hill, D. C. See Kingery, W. D.
Hill, Janet M. See Sugama, Toshifumi
Hill, Michael D.; Wong-Ng, Winnie Kwai; Chiang, Chwan K.; Fuller, Edwin R., Jr.; Paretzkin, Boris; Blendell, John E.; Lagergren, Eric; and Kacker, Raghu
Effect of composition on superconducting properties in the system Ba-Y-Gd-Cu-O. (9) 2390
Hill, Robert G.; Goat, Christopher; and Wood, David
Thermal analysis of SiO_2–Al_2O_3–CaO–CaF_2 glass. (4) 778
Hillig, William B.
Interaction of a crack in a glass matrix with an inclined fiber. (11) 3172
Hills, Marian E. See Harris, Daniel C.
Hintermann, Hans E. See Garg, Diwakar
Hirano, Shin-ichi; Yogo, Toshinobu; Kikuta, Ko-ichi; and Ogiso, Ko-ji
Preparation of strontium barium niobate by sol–gel method. (6) 1697
Hirano, Shin-ichi; Yogo, Toshinobu; Kikuta, Koichi; Araki, Yasushi; Saitoh, Masahiro; and Ogasahara, Satoru
Synthesis of highly oriented lead zirconate–lead titanate film using metallo-organics. (10) 2785
Hirano, Shin-ichi; Yogo, Toshinobu; Kikuta, Ko-ichi; Morishita, Toshiyuki; and Ito, Yasuhiro
Preparation of potassium tantalate niobate by sol–gel method. (6) 1701
Hirano, Shin-ichi; Yogo, Toshinobu; Kikuta, Kō-ichi; and Yamagiwa, Katsuya
Preparation of β-BaB_2O_4 powders and thin films by sol–gel method. (9) 2590
Hirao, Kazuyuki See Tanabe, Setsuhisa
Hirata, Toshiya See Zhu, Hai-Yan
Hiremath, Basavaraj V.; Newnham, Robert E.; and Cross, Leslie E.
Barrier layer capacitor using barium bismuth plumbate and barium plumbate. (11) 2953
Hitt, James E. See Weimer, Alan W.
Hlavacek, Vladimir See Viljoen, Hendrik J.
Ho, In-Chyuan; and Fu, Shen-Li
Effect of reoxidation on the grain-boundary acceptor-state density of reduced $BaTiO_3$ ceramics. (3) 728
Hockey, Bernard J.; and Wiederhorn, Sheldon M.
Effect of microstructure on the creep of siliconized silicon carbide. (7) 1822
Hodge, James D. See Halloran, John W.
Hoffmann, Michael J. See Ohya, Yutaka; Szabó, D. V.
Holmes, John W. See Cho, Chongdu
Holmes, John W.; and Cho, Chongdu
Experimental observations of frictional heating in fiber-reinforced ceramics. (4) 929
Holt, J. Birch See Dunmead, Stephen
Home, Scot E. See Harris, Daniel C.
Hosono, Hideo See Lee, Won-Hyuk
Hosono, Hideo; and Abe, Yoshihiro
Porous glass-ceramics with a skeleton of the fast-lithium-conducting crystal $Li_{1+x}Ti_{2-x}Al_x(PO_4)_3$. (10) 2862
Howard, Scott A. See Shen, Jyung-Lyang
Howard, Scott A.; Yau, Jen-Kuan; and Anderson, Harlan U.
X-ray powder diffraction structural phase-transition study of $La(Cr_{1-x}MN_x)O_3$ (x = 0 to 0.25) using the Rietveld method of analysis. (6) 1685
Hrma, Pavel See Kim, Dong-Sang
Hu, Ching-Li; and Rahaman, Mohamed N.
Factors controlling the sintering of ceramic particulate composites: II, Coated inclusion particles. (8) 2066
Hu, Xiaozhi; and Mai, Yiu-Wing
Crack-bridging analysis for alumina ceramics under monotonic and cyclic loading. (4) 848
Huang, Chi-Yen See Wang, Sea Fue
Huang, Hua See Zhang, Jinsong
Huang, Jow-Lay; and Simms, Frederick E.
Nitridation of silicon containing MgO and CeO_2 powders and SiC whiskers. (6) 1662
Huang, Jung-Sheng; Ohland, Matthew; and Williams, Wendell S.
Composition and mechanical properties of rf-sputtered amorphous silicon carbide coating. (9) 2623
Huang, Peiyun See Du, Yong
Huang, Qiang See Tu, Gan Feng
Hubbard, Camden R. See Martin, M. Hogan E.; Srinivasan, Ram
Hubert-Pfalzgraf, Liliane G. See Parraud, Stephen; Renoult, Olivier
Huebner, Wayne See Wang, Sea Fue
Huybrechts, Ben; Ishizaki, Kozo, and Takata, Masasuke
Experimental evaluaton of the acceptor-states compensation in positive-temperature-coefficient-type barium titanate. (3) 722
Hwang, Jiung-Bin See Fang, Tsang-Tse
Hwang, Shyh-Lung See Chen, I-Wei
Ichihara, Masaki See Iwanaga, Hiroshi
Igawa, Naoki See Kang, Thae-Khapp
Iijima, Sumio See Ajayan, Pulickel M.
Ikawa, Hiroyuki See Nakano, Satoshi
Ikushima, Akira J. See Kasuga, Toshihiro
Il-Hiun, Kuk See Kang, Thae-Khapp
Inagaki, Michio See Shimada, Shiro
Inghels, Eric See Shaw, Michael C.
Inniss, Daryl; Brownlow, Darryl L.; and Kurkjian, Charles R.
Effect of sodium chloride solutions on the strength and fatigue of bare silica fibers. (2) 364
Inniss, Daryl; Kurkjian, Charles R.; and Brownlow, Darryl L.
Summary of stress-dependent activation energy for lightguide fibers. (12) 3485
Inoue, Masashi; Kominami, Hiroshi; and Inui, Tomoyuki
Thermal transformation of χ-alumina formed by thermal decomposition of aluminum alkoxide in organic method. (9) 2597
Inui, Tomoyuki See Inoue, Masashi
Ip, Sik Y.; McNallan, Michael J.; and Park, Dong S.
Active oxidation of SiC-based ceramics in Ar-2% Cl_2–O_2 gas mixtures at 1000°C. (7) 1942
Ise, Norio See Nakanishi, Kazuki
Iseki, Takayoshi See Mori, Tsutomu; Suematsu, Hisayuki; Yano, Toyohiko
Ishida, Hideki See Mitsuda, Takeshi

Ishida, Hideki; Mabuchi, Katsumi; Sasaki, Kaori; and Mitsuda, Takeshi
Low-temperature synthesis of β-Ca_2SiO_4 from hillebrandite. (9) 2427
Ishida, Hideki; Okada, Yoshihiko; and Mitsuda, Takeshi
Highly reactive β-dicalcium silicate: II. Hydration behavior at 25°C followed by ^{29}Si nuclear magnetic resonance. (2) 359
Ishida, Hideki; Sasaki, Kaori; and Mitsuda, Takeshi
Highly reactive β-dicalcium silicate: I, Hydration behavior at room temperature. (2) 353
Ishida, Hideki; Sasaki, Kaori; Mizuno, Akihiro; Okada, Yoshihiko; and Mitsuda, Takeshi
Highly reactive β-dicalcium silicate: IV, Ball-milling and static hydration at room temperature. (10) 2779
Ishida, Hideki; Sasaki, Kaori; Okada, Yoshihiko; and Mitsuda, Takeshi
Highly reactive β-dicalcium silicate: III, Hydration behavior at 40–80°C. (9) 2541
Ishihara, Tatsumi; Kometani, Kazuhiro; Mizuhara, Yukako; and Takita, Yusaku
Mixed oxide capacitor of CuO–$BaTiO_3$ as a new type CO_2 gas sensor. (3) 613
Ishizaki, Kozo See Huybrechts, Ben
Ishizawa, Nobuo See Yashima, Masatomo
Ito, Suketoshi See Fukuda, Koichiro
Ito, Yasuhiro See Hirano, Shin-ichi
Iwanaga, Hiroshi; Iwasaki, Takeshi; Reizen, Kouji; Matsunami, Tadashi; Ichihara, Masaki; and Takeuchi, Shin
Method for tensile experiments with ceramic fibers having a diameter of a few micrometers. (5) 1297
Iwasaki, Takeshi See Iwanaga, Hiroshi
Izaki, Kansei See Rouxel, Tanguy
Jacob, K. Thomas; and Mathews, Tom
Phase relations and thermodynamic properties of condensed phases in the system Sr–Cu–O. (12) 3225
Jacob, K. T.; Mukhopadhyay, Sukanya; and Shukla, A. K.
Tie lines and activities in the system CoO–MgO–SiO_2 at 1373 K. (11) 3081
Jacobson, Nathan S.; Lee, Kang N.; and Fox, Dennis S.
Reactions of silicon carbide and silicon(IV) oxide at elevated temperatures. (6) 1603
Jadaan, Osama M.; Shelleman, David L.; and Tressler, Richard E.
Lifetime prediction of internally pressurized siliconized SiC tubes subjected to creep rupture loading. (2) 424
Jaeger, Nancy A. See Harris, Daniel C.
Jaganathan, James See Ewing, Kenneth J.
Jakus, Karl See Ritter, John E.
James, M. R. See Dauskardt, Reinhold H.
James, Peter F. See Nan, Y.
Jang, Cheol W. See Jang, Hyun M.
Jang, Hyun M.; Kim, Kwang S.; and Jung, Chang J.
Development of SiC-whisker-reinforced lithium aluminosilicate matrix composites by a mixed colloidal processing route. (10) 2883
Jang, Hyun M.; Moon, Jong H.; and Jang, Cheol W.
Homogeneous fabrication of Al_2O_3–ZrO_2–SiC whisker composite by surface-induced coating. (12) 3369
Jang, Hyun M.; Oh, S. Hoon; and Moon, Jong H.
Thermodynamic stability and mechanisms of formation and decomposition of perovskite $Pb(Zn_{1/3}Nb_{2/3})O_3$ prepared by the PbO flux method. (1) 82
Jang, Se-Aug; and Choi, Gyeong Man
Effects of dopants on the complex impedance and dielectric properties of aluminum nitride. (11) 3145
Janney, Mark A.; Calhoun, Clyde L.; and Kimrey, Hal D.
Microwave sintering of solid oxide fuel cell materials: I, Zirconia–8 mol% yttria. (2) 341
Janora, Kevin H. See Will, Fritz G.
Jantzen, Carol M.
Nuclear waste glass durability: I, Predicting environmental response from thermodynamic (Pourbaix) diagrams. (9) 2433
Jaymes, Isabelle; and Douy, André
Homogeneous mullite-forming powders from spray-drying aqueous solutions. (11) 3154
Jenkins, Michael G. See Ferber, Mattison K.
Jennings, Hamlin M. See Christensen, Bruce J.; Sujata, K.
Jeong, Jun-Whan; Yoon, Duk-Yong; Lee, Jeong-Yong; and Kim, Doh-Yeon
Grain boundary migration in cubic zirconia–yttria induced by addition of magnesia at varying concentrations. (10) 2659
Jessen, Todd L. See Bender, Barry A.
Jessen, Todd L.; and Lewis, David, III
Limiting subcritical crack growth in glass-matrix composites. (8) 2219
Jewell, John M.; and Shelby, James E.
Effects of water content on the properties of sodium aluminosilicate glasses. (4) 878
Jihong, She See Dongliang, Jiang
Jin, Zhanpeng See Du, Yong
Johansson, Thomas See Bartek, Alena
Johnson, D. Lynn See Hansen, James D.
Johnson, Sylvia M. See Cinibulk, Michael K.
Johnson, William B. See Breval, Else
Johnston, Gregory P.; Muenchausen, Ross E.; Smith, Douglas M.; and Foltyn Steve R.
Reactive laser ablation synthesis of nanosize aluminum nitride. (12) 3465
Johnston, Gregory P.; Muenchausen, Ross; Smith, Douglas M.; Fahrenholtz, William; and Foltyn, Steve
Reactive laser ablation synthesis of nanosize alumina powder. (12) 3293
Jones, Aaron See Cutler, Raymond A.
Jones, Robert L.; and Mess, Derek
India as a hot corrosion-resistant stabilizer for zirconia. (7) 1818
Jung, Chang J. See Jang, Hyun M.
Kacker, Raghu See Hill, Michael D.
Kado, Shigeo See Ogawa, Toru
Kageyama, Keisuke
Crystal structure and microwave dielectric properties of $Ba(Zn_{1/3}Ta_{2/3})O_3$–$(Sr,Ba)(Ga_{1/3}Ta_{1/2})O_3$ Ceramics. (7) 1767
Kahn, Manfred See Cheng, Si; Nazeri, Azar
Kahn, Manfred; and Chase, Mark
Effects of heat temperature on multilayer piezoelectric ceramic–air composites. (3) 649
Kaiser, Arno; Sommer, Burkhard; and Woermann, Eduard
The system CaO–"$CaCr_2O_4$"–$CaAl_2O_4$ in air and under mildly reducing conditions. (6) 1463
Kakegawa, Kazuyuki See Abe, Yoshiyuki
Käll Per-Olov See Persson, Jeanette
Kamata, Kiichiro See Nishino, Junichi
Kamiya, Kanichi; Okasaka, Kensuke; Wada, Masanori; Nasu, Hiroyuki; and Yoko, Toshinobu
Extended X-ray absorption fine structure (EXAFS) study on the local environment around copper in low thermal expansion copper aluminosilicate glasses. (2) 477
Kanazawa, Katsuhito See Adschiri, Tadafumi
Kaneko, Hiroyuki See Taimatsu, Hitoshi
Kanel, Gennady See Bless, Stephan J.
Kang, Suk-Joong L. See Kim, Chan Joong; Park, Sang-Yeup
Kang, Thae-Khapp; Nagasaki, Takanori; Igawa, Naoki; Il-Hiun, Kuk; and Ohno, Hideo
Electrical properties of cubic, stabilized, single ZrO_2–Gd_2O_3 crystals. (8) 2297
Kangutkar, Pramod See Elkind, Alexander
Kashimura, Satoru See Ogawa, Toru
Kaster, Michael D. See Besmann, Theodore M.
Kasuga, Toshihiro; Nakajima, Kiichi; Uno, Tomoko; and Yoshida, Masahiro
Preparation of zirconia-toughened bioactive glass-ceramic composite by sinter–hot isostatic pressing. (5) 1103
Kasuga, Toshihiro; Yoshida, Masahiro, Ikushima, Akira J.; Tuchiya, Maki; and Kusakari, Haruka
Bioactivity of zirconia-toughened glass-ceramics. (7) 1884
Kato, Etsuro See Kobayashi, Yuichi
Kato, Satoshi See Yano, Toyohiko
Kato, Yoshinari See Hanada, Teiichi
Kaučič, Venčeslav See Mitrič, Breda
Kearns, Michael See Ruh, Robert
Kelkar, Girish P. See White, Kenneth W.
Keller, Kristen See Parthasarathy, Triplicane A.
Kelton, Kenneth F.
Estimation of the nucleation rate by differential scanning calorimetry. (9) 2449
Khasgiwale, Niranjan; and Chan, Helen M.
High-temperature indentation studies on the {110} plane of single-crystal magnesium oxide. (7) 1924
Kiggans, James O. See Plovnick, Ross H.
Kikuchi, Masao; Takahashi, Yutaka; Suga, Tadatomo; Suzuki, Shigenobu; and Bando, Yoshio
Mechanochemical polishing of silicon carbide single crystal with chromium(III) oxide abrasive. (1) 189
Kikuchi, Teruo See Ogawa, Toru
Kikuta, Ko-ichi See Hirano, Shin-ichi
Kim, Chan Joong; Kang, Suk-Joong L.; and Won, Dong-Yeon
Compact swelling in $Bi_{1.4}Pb_{0.6}Sr_2Ca_2Cu_{3.6}O_y$ during the formation of high-T_c superconducting phase. (3) 570
Kim, Chong Hee See Kim, Do-Hyeong; Kim, Hong-Soo
Kim, Doh-Yeon See Jeong, Jun-Whan
Kim, Do-Hyeong; and Kim, Chong Hee
Entrapped gas effect in the fast firing of yttria-doped zirconia. (3) 716
Kim, Dong-Sang; and Hrma, Pavel
Foaming in glass melts produced by sodium sulfate decomposition under ramp heating conditions. (11) 2959
Kim, Hong-Soo; Sung, Gun Yong; and Kim, Chong Hee
Determination of inversion temperature of Sb_2O_3-doped $BaTiO_3$ positive temperature coefficient of resistivity (PTCR) ceramics by the finite difference method. (3) 587
Kim, Jin-Young See Uematsu, Keizo
Kim, Kitae T.; and Son, Geonseog
Cyclic compaction of ceramic powders. (11) 3157
Kim, Kitae T.; and Suh Jeong
Fracture of alumina tubes under combined tension/torsion. (4) 896
Kim, Kwang S. See Jang, Hyun M.
Kim, Youn Joong See Nettleship, Ian
Kim, Youn Joong; Nettleship, Ian; and Kriven, Waltraud M.
Phase transformations in dicalcium silicate: II, TEM studies of crystallography, microstructure, and mechanisms. (9) 2407
Kimrey, Hal D. See Janney, Mark A.
Kimura, Shigeyuki; and Kitamura, Kenji
Floating zone crystal growth and phase equilibria: A review. (6) 1440
Kingery, W. D.; Pappis, J.; Doty, M. E.; and Hill, D. C.
Oxygen ion mobility in cubic $Zr_{0.85}Ca_{0.15}O_{1.85}$. (3) 483
Kinser, Donald L. See Wiedlocher, David E.
Kirby, Kevin W. See Wechsler, Barry A.
Kitamura, Kenji See Kimura, Shigeyuki
Kitaoka, Satoshi; Yamaguchi, Yoshimi; and Takahashi, Yoshihide
Tribological characteristics of α-alumina in high-temperature water. (11) 3075
Kitayama, Kenzo
Thermogravimetric study of the M-Co-O system: I, M = Ta and Nb at 1200°C. (6) 1447
Klein, Lisa C. See Yu, Chunzhe
Klemptner, Lori Jo See Halloran, John W.
Klesnar, Helmuth; and Rojl, Peter
Phase relations in the ternary systems Nd–B–N, Sm–B–N, and Gd–B–N. (10) 2825
Klimkiewicz, Maria See Barnes, Mary W.
Knowles, Kevin M. See Yang, Xiao Feng
Knudsen, Arne K. See Potter, Gregg E.
Ko, Yung-Chao See Chan, Chen-Feng
Kobayashi, Albert S. See Deobald, Lyle R.
Kobayashi, F. See Ogawa, Toru
Kobayashi, Hidehiko See Mori, Toshiyuki
Kobayashi, Yuichi; Ohira, Osamu; Ohashi, Yasuo; and Kato, Etsuro
Effect of firing temperature on bending strength of porcelains for tableware. (7) 1801
Kodaira, Kohei See Unuma, Hidero
Kodama, Hironori; and Miyoshi, Tadahiko
Fabrication and fracture behavior of novel SiC ceramics having rodlike grains. (6) 1558
Kodama, Tatsuya; Tominaga, Ken-ichi; Tabata, Masahiro; Yoshida, Takashi; and Tamaura, Yutaka
Decomposition of carbon dioxide to carbon with active wustite at 300°C. (5) 1287
Kodas, Toivo T. See Moore, Katherine A.
Kofstad, Per See Norby, Truls
Kokubo, Tadashi See Li, Panjian
Komarneni, Sridhar See Liu, Chunling; Prasadarao, Alamanda V.; Selvaraj, Ulagaraj
Komatsu, Takayuki; Ueta, Michiko; Ohki, Tomohiro; Sato, Ryuji; and Matusita, Kazumasa
Superconducting properties of barium-doped $(Bi,Pb)_2Sr_2Ca_2Cu_3O_y$ glass-ceramics. (7) 1864
Kometani, Kazuhiro See Ishihara, Tatsumi
Kominami, Hiroshi See Inoue, Masashi
Komvopoulos, K.
Processing effects on microstructural characteristics and properties of reactively ion-plated titanium nitride coatings. (4) 854
Kondo, Ken-ichi; and Sawai, Sumiichi
Microstructure of a shock-consolidated diamond compact consisting of fine particles. (1) 253
Koo, Horng-Show See Chen, Fueng-Ho
Kostić, Branko; Zhang, Tao; and Evans, Julian R. G.
Measurement of residual stress in injection-molded ceramics. (10) 2773
Koumoto, Kunihito See Ohara, Yoshinobu
Krasevec, Viktor See Bruley, John
Krause, Ralph F., Jr.
Observed and theoretical creep rates for an alumina ceramic and a silicon nitride ceramic in flexure. (5) 1307
Krishnamurthy, R. See Annamalai, V. E.
Kriven, Waltraud M. See Chan, Chin Jong; Kim, Youn Joong; Nettleship, Ian
Krstic, Vladimir, D.
Production of fine, high-purity beta silicon carbide powders. (1) 170
Kruger, Gert J. See Adendorff, Keith T.
Kruis, Frank Einar; Scarlett, Brian; Bauer, Robert A.; and Schoonman, Joop
Thermodynamic calculations on the chemical vapor deposition of silicon nitride and silicon from silane and chlorinated silanes. (3) 619
Krutter, H. See Warren, Bernard E.

Krynicki, Joseph W.; Nagle, Dennis C.; and Green, Robert E., Jr.
Photoelastic measurement of residual thermomechanical stress in SiC-reinforced glass composites. (8) 2225
Kudallur, Suresh See Burns, S. J.
Kumaki, Junichi See Maki, Iwao
Kumar, Devendra See Parkash, Om
Kumar, Sujeet See Burns, S. J.
Kumar, Umesh; Cross, L. Eric; and Halliyal, Arvind
Pyroelectric and electrostrictive properties of $(1 - x - y)$ PZN-xBT-yPT ceramic solid solutions. (8) 2155
Kuomoto, Kunihito See Pai, Chul-Hoon
Kurkjian, Charles R. See Inniss, Daryl
Kusakari, Haruka See Kasuga, Toshihiro
Kutty, T. R. N. See Ravi, V.
Kuwahara, Yoshitaka See Awano, Masanobu
Kwan, Stephen See LaRosa, Judith L.
Lagergren, Eric See Hill, Michael D.
Laine, Richard M. See McGrath, Patrick J.
Lakeman, Charles D. E.; and Payne, David A.
Processing effects in the sol–gel preparation of PZT dried gels, powders, and ferroelectric thin layers. (11) 3091
Lam, David See Heo, Jong
Landon, Martine See Xu, Youren
Lange, Fred F. See Balmer, Mari Lou; Folsom, Craig A.; Slamovich, Elliot B.; Sudre, Olivier
Lapp, Josef C. See Dumbaugh, William H.
Larker, Richard
Reaction sintering and properties of silicon oxynitride densified by hot isostatic pressing. (1) 62
LaRosa, Judith L.; and Cawley, James D.
Fractal dimension of alumina aggregates grown in two dimensions. (7) 1981
LaRosa, Judith L.; Kwan, Stephen; and Grutzeck, Michael W.
Zeolite formation in class F fly ash blended cement pastes. (6) 1574
LaSalvia, Jerry C.; Meyer, Lothar W.; and Meyers, Marc A.
Densification of reaction-synthesized titanium carbide by high-velocity forging. (3) 592
Lawn, Brian R. See Braun, Linda M.; Wan, Kai-Tak
Lawrence, Charles W. See Ashcroft, Ian A.
Lawson, Toni A. See Blackburn, Stuart
Leatherman, Gary L. See Swab, Jeffrey J.
Lee, Dong-Joo See Li, Chien-Wei
Lee, Farnjeng See Sandlin, Michael S.
Lee, Farnjeng; and Bowman, Keith J.
Texture and anisotropy in silicon nitride. (7) 1748
Lee, Jeong-Yong See Jeong, Jun-Whan
Lee, Kang N. See Jacobson, Nathan S.
Lee, William E. See Nan, Y.
Lee, Won-Hyuk; Hosono, Hideo; and Abe, Yoshihiro
Concentrations of residual carbonate ions in the Bi-Sr-Ca-Cu-O glasses. (6) 1658
Lee, Woo Y.; Strife, James R.; and Veltri, Richard D.
Low-pressure chemical vapor deposition of α-Si_3N_4 from SiF_4 and NH_3: Kinetic characteristics. (8) 2200; Low-pressure chemical vapor deposition of α-Si_3N_4 from SiF_4 and NH_3: Nucleation and growth characteristics. (10) 2803
Lee, Yih-Shing; and Tseng, Tseung-Yuen
Phase identification and electrical properties in ZnO-glass varistors. (6) 1636
Lehman, Richard L.
Lead-ion stability in soda–lime lead silicate glasses. (8) 2194
Lejeune, Martine See Renoult, Olivier
Lemaître, Jacques See Chen, Zhien-Chi
Lessing, Paul A. See Tai, Lone-Wen
Levi, Carlos G. See Balmer, Mari Lou
Lewis, David, III See Bender, Barry A.; Jessen, Todd L.
Lewis, Gladius; and Ostvoll, Arnfinn
Constitutive equations for the creep of a silicon carbide whisker-reinforced polycrystalline alumina composite material. (12) 3481
Le Caër, Gerard See Matteazzi, Paolo
Le Floch, Sylvie See Gervais, Monique
Li, Chien-Wei; Lee, Dong-Joo; and Lui, Siu-Ching
R-curve behavior and strength for in-situ reinforced silicon nitrides with different microstructures. (7) 1777
Li, Guangqiang See Zhang, Jinsong
Li, Jian-Guo
Wetting and interfacial bonding of metals with ionocovalent oxides. (11) 3118
Li, Kangjie See Burns, S. J.
Li, Ming See Guiu, Frank
Li, Panjian; Ohtsuki, Chikara; Kokubo, Tadashi; Nakanishi, Kazuki; Soga, Naohiro; Nakamura, Takashi; and Yamamuro, Takao
Apatite formation induced by silica gel in a simulated body fluid. (8) 2094
Li, Victor C. See Wu Hwai-Chung
Li, Yan Z. See Wang, Zhanyi
Li, Yongxiang See Cheng, Humin
Liechti, Thomas See Berkowski, Marek
Lim, Cheryl S.; Finlayson, Trevor R.; Ninio, Fred; and Griffiths, John R.
In-situ measurement of the stress-induced phase transformations in magnesia-partially-stabilized zirconia using Raman spectroscopy. (6) 1570
Lin, Chien-Cheng See Zangvil, Avigdor
Lin, Chih-Kuang Jack; Socie, Darrell F.; Xu, Youren; and Zangvil, Avigdor
Static and cyclic fatigue of alumina at high temperatures; II, Failure analysis. (3) 637
Lin, Edmond C. Y. See Chaklader, Asoke C. D.
Lin, Lang-Sheng See Wang, Chuei-Tang
Lin, Wai; Yang, Jenn-Ming; Ting, Su-Jen; Ezis, Andre; and Shih, C. James
Processing and microstructural development of *in situ* TiN-reinforced silicon nitride/silicon oxynitride composites. (11) 2945
Lipin, Bruce R. See Ulmer, Gene C.
Lipin, Bruce R.; Mysen, Bjorn O.; Ulmer, Gene C.
Collection of papers on phase equilibria. (6) 1316
Litovsky, Efim Ya.; and Shapiro, Michael
Gas pressure and temperature dependences of thermal conductivity of porous ceramic materials: Part I, Refractories and ceramics with porosity below 30%. (12) 3425
Liu, Chunling; Komarneni, Sridhar; and Roy, Rustum
Crystallization of anorthite-seeded albite glass by solid-state epitaxy. (10) 2665
Liu, Jenq See Ownby, P. Darrell; Shen, Jyung-Lyang
Liu, Shih-Yu; and Chen, I-Wei
Fatigue deformation mechanisms of zirconia ceramics. (5) 1191.
Liu, Tianshun; and Mai, Yiu-Wing
Strain-rate-dependent transformation behavior of a 9 mol% Ce-TZP ceramic. (12) 3495
Liu, Yixiong; and Patterson, Burton R.
Frequency of pore location in sintered Al_2O_3. (9) 2599
Lloyd, Isabel K. See Cheng, Si
Lodding, Alexander R.; Engström, E. Urban; Zoitos, Bruce K.; Clark, David E.; and Wicks, George G.
Elemental depth profiling of nuclear waste glasses after two-years burial in a salt geology. (10) 2702
Longo, Elson See Zaghete, Maria A.
Look, Jee Loon; and Zukoski, Charles F.
Alkoxide-derived titania particles: Use of electrolytes to control size and agglomeration levels. (6) 1587
Lopato, Lidiya M. See Andrievskaya, Elena R.
Lowe-Ma, Charlotte K. See Vanderah, Terrell A.
Lu, Chung-Hsin; Shinozaki, Kazuo; and Mizutani, Nobuyasu
Formation process and microstructural evolution of sol–gel-derived ferroelectric lead iron tungstate ceramics. (5) 1303
Lui, Siu-Ching See Li, Chien-Wei
Lundberg, Mats; and Rosén, Erik
Equilibrium studies of the system '(Fe,Co)O'–$(Fe,Co)_3O_4$ by solid-state emf measurements in the temperature range 970 to 1370 K. (6) 1452
Luo, Jian Shu; Michel, Daniel; and Chevalier, Jean-Pierre
Metallurgical route to high-T_c superconducting ceramics. (2) 282
Lutar, Karel See Mitrič, Breda
Luthra, Krishan L.; and Park, Hee Dong
Chemical considerations in carbon-fiber/oxide-matrix composites. (7) 1889
Lutterotti, Luca See Scardi, Paolo
Lutz, Ekkehard, H.; and Swain, Michael V.
Fracture toughness and thermal shock behavior of silicon nitride–boron nitride ceramics. (1) 67; Stress–strain behavior of alumina, magnesia-partially-stabilized zirconia, and duplex ceramics and its relevance for flaw resistance, K^R-curve behavior, and thermal shock behavior. (11) 3058; Stress-strain behavior of duplex ceramics: I, Observations. (7) 1729
Ma, Jiming See Cheng, Humin
Mabuchi, Katsumi See Ishida, Hideki
Machida, Michihide See Mizuta, Hiroyuki
Mackert, J. Rodway, Jr.; Conner, Trent G.; Ringle, Robert D.; Parry, Edward E.; and Fairhurst, Carl W.
X-ray diffraction characterization of the enamel–steel interface. (11) 3087
Mackin, Thomas J.; Yang, Jingyu; and Warren, Paul D.
Influence of fiber roughness on the sliding behavior of sapphire fibers in TiAl and glass matrices. (12) 3358
Mackin, Thomas J.; and Zok, Frank W.
Fiber bundle pushout: A technique for the measurement of interfacial sliding properties. (11) 3169
Maddalena, Amedeo
Determination of Young's modulus of thin films. (10) 2915
Maeda, Masaki See Mizuta, Hiroyuki
Maekawa, Masashi See Ochi, Yasuo
Mah, Tai-Il See Parthasarathy, Triplicane A.
Mah, Tai-Il; and Petry, M. Dennis
Eutectic composition in the pseudobinary of $Y_4Al_2O_9$ and Y_2O_3. (7) 2006
Mai, Yiu-Wing See Hu Xiaozhi; Liu, Tianshun
Maillat, Michel See Garg, Diwakar
Maistrelli, Paul See Scardi, Paolo
Maki, Iwao See Fukuda, Koichiro
Maki, Iwao; Fukuda, Koichiro; Yoshida, Hideto; and Kumaki, Junichi
Effect of MgO and SO_3 on the impurity concentration in alite in portland cement clinker. (11) 3163
Malone, Philip G. See Roy, Amitava
Mamantov, Gleb See Dai, Sheng
Manghnani, Murli H. See Fisher, Edward S.
Mani, Themanam Veettil See Warrier, Krishna Gopa Kumara
Manoharan, S. Sundar; and Patil, Kashinath C.
Combustion synthesis of metal chromite powders. (4) 1012
Mantese, Joseph V. See Catalan, Antonio B.; Micheli, Adloph L.
Maple, M. Brian See Pak, Sung S.
Marchand, André See Saugnac, Frédéric
Mariano, Anthony N. See Shannon, Robert D.
Markgraf, Steven A.; Sharma, Shiv K.; and Bhalla, Amar S.
Raman study of glasses of $Ba_2TiSi_2O_8$ and $Ba_2TiGe_2O_8$. (9) 2630
Marple, Basil R.; and Green, David J.
Mullite/alumina particulate composites by infiltration processing: IV, Residual stress profiles. (1) 44
Marques, Fernando M. B. See Wirtz, Gerald P.
Marques, Fernando M. B.; and Wirtz, Gerald P.
Oxygen fugacity control in nonflowing atmospheres: I, Experimental observations in CO/CO_2 and O_2/N_2 mixtures. (2) 369
Marquis, Didier See Hild, François
Marquis, Peter M. See Wang, Jia G.
Marshall, David B. See Folsom, Craig A.; Shaw, Michael C.; Yu, Cheng-Sheng
Martens, Liesan A. A. G. See Buijs, Maarten
Martin, M. Hogan E.; Ober, Chris K.; Hubbard, Camden R.; Porter, Wally D.; and Cavin, O. Burl
Poly(methacrylate) precursors to forsterite. (7) 1831
Martin, Roger I.; and Brown, Paul W.
Heteroepitaxial growth of calcium silicate hydrate on calcium germanate hydrate. (9) 2619; Hydration of germanium oxide carnotite. (4) 1035
Martin, Steve W. See Van Kirk, Susan E.
Martin, Steve W.; Bain, Debra; Budhwani, Karim; and Feller, Steven
^{29}Si MAS-NMR study of the short-range order in lithium borosilicate glasses. (5) 1117
Martínez-Lope, M. J. See Baura-Peña, M. P.
Mascarenhas, Yvonne P. See Zaghete, Maria A.
Mason, Thomas O. See Christensen, Bruce J.; Sujata, K.
Massuda, Mona See Pilgrim, Steven M.
Mastrangelo, Sebastian V. R. See Akhtar, M. Kamal
Mathews, Tom See Jacob, K. Thomas
Matsuda, Daisuke See Taguchi, Hideki
Matsui, Kunihito See Shimada, Shiro
Matsumoto, Seiichiro See Mitamura, Hisayoshi
Matsunami, Tadashi See Iwanaga, Hiroshi
Matsuoka, Hideki See Nakanishi, Kazuki
Matteazzi, Paolo; and Le Caër, Gerard
Synthesis of nanocrystalline alumina–metal composites by room-temperature ball-milling of metal oxides and aluminum. (10) 2749
Matusita, Kazumasa See Komatsu, Takayuki
Maya, Leon
Plasma-enriched chemical vapor deposition of boron nitride using polymeric cyanoborane as source. (7) 1985; Plasma-enhanced chemical vapor deposition of boron nitride using polymeric cyanoborane as source—correction. (10) 2919
Mazdiyasni, K. S. See Pak, Sung S.
Mazza, Daniele; Vallino, Mario; and Busca, Guido
Mullite-type structures in the systems Al_2O_3–Me_2O (Me = Na,K) and Al_2O_3–B_2O_3. (7) 1929
McCauley, Ronald A. See McGarry, Michael J.
McGarry, Michael J.; and McCauley, Ronald A.
Subsolidus phase equilibria of the MgO–V_2O_5–SiO_2 system. (10) 2874
McGrath, Patrick J.; and Laine, Richard M.
Theoretical process development for freeze-drying spray-frozen aerosols. (5) 1223
McNallan, Michael J. See Ip, Sik Y.; Park, Dong Soo
Mecholsky, J. J., Jr. See Harris, Daniel C.
Meixner, Hans See Fleischer, Maximilian
Mendoza, Edgar A. See Heo, Jong
Meriani, Sergio See Schmid, Chiari
Mess, Derek See Jones, Robert L.
Metselaar, Rudi See van Hoek, Johan A. M.
Meyer, Karsten See Xue, Liang A.
Meyer, Lothar W. See LaSalvia, Jerry C.

Meyer, Richard, Jr. See Chen, Jayu
Meyers, Marc A. See LaSalvia, Jerry C.
Michel, Daniel See Luo, Jian Shu
Michell, Adolph L. See Catalan, Antonio B.
Micheli, Adolph L.; Dungan, Dennis F.; and Mantese, Joseph V.
High-density yttria for practical ceramic applications. (3) 709
Mikkola, Donald E. See Wang, Yucong
Miller, Gary A. See French, Jonathan D.; Harmer, Martin P.; Russo, Charles J.
Minami, Tsutomu See Tatsumisago, Masahiro
Mirtič, Breda; Fajgelj, Aleš; Lutar, Karel; Schara, Milan; and Kaučič, Venčeslav
Determination of chromium oxidation states in part of the system CaO–3CaO·Cr_2O_3 in air. (8) 2184
Mitamura, Hisayoshi; Matsumoto, Seiichiro; Hart, Kaye P.; Miyazaki, Takashi; Vance, Eric R.; Tamura, Yukito; Togashi, Yoshihiro; and White, Timothy J.
Aging effects on curium-doped titanate ceramic containing sodium-bearing high-level nuclear waste. (2) 392
Mitamura, Takashi See Mori, Toshiyuki
Mitomo, Mamoru; and Uenosono, Satoshi
Microstructural development during gas-pressure sintering of α-silicon nitride. (1) 103
Mitra, S. See Dutta, I.
Mitsuda, Takeshi See Ishida, Hideki
Mitsuda, Takeshi; Sasaki, Kaori; and Ishida, Hideki
Phase evolution during autoclaving process of aerated concrete. (7) 1858
Miura, Koh See Unuma, Hidero
Miyamoto, Yoshinari See Taguchi, Hideki; Zeng, Jianren
Miyanishi, Hideshi See Ogawa, Toru
Miyashita, Masayori See Uematsu, Keizo
Miyazaki, Takashi See Mitamura, Hisayoshi
Miyoshi, Tadahiko See Kodama, Hironori
Mizuhara, Yukako See Ishihara, Tatsumi
Mizuno, Akihiro See Ishida, Hideki
Mizuta, Hiroyuki; Oda, Kiichi; Shibasaki, Yasuo; Maeda, Masaki; Machida, Michihide; and Ohshima, Kazuyuki
Preparation of high-strength and translucent alumina by hot isostatic pressing. (2) 469
Mizutani, Nobuyasu See Lu, Chung-Hsin
Montgomery, Fred C. See Pak, Sung S.
Montross, Charles S.
Pro- and subeutectoid behavior of the tetragonal phase in magnesia-partially-stabilized zirconia. (2) 463
Moon, Jong H. See Jang, Hyun M.
Moore, Katherine A.; Cesarano, Joseph, III; Smith, Douglas M.; and Kodas, Toivo T.
Synthesis of submicrometer mullite powder via high-temperature aerosol decomposition. (1) 213
Moore, William G. See Weimer, Alan W.
Mori, Toshiyuki; Yamamura, Hiroshi; Kobayashi, Hidehiko; and Mitamura, Takashi
Preparation of high-purity $ZrSiO_4$ powder using sol–gel processing and mechanical properties of the sintered body. (9) 2420
Mori, Tsutomu See Suematsu, Hisayuki
Mori, Tsutomu; Suzuki, Tetsuya; and Iseki, Takayoshi
Deformation by the stress-induced transport of helium bubbles in silicon carbide. (1) 237
Morishita, Toshiyuki See Hirano, Shin-ichi
Morningstar, O. See Warren, Bernard E.
Morscher, Gregory N.; and DiCarlo, James A.
A simple test thermomechanical evaluation of ceramic fibers. (1) 136
Mort, Paul R.; and Riman, Richard E.
Reactive multicomponent powder mixtures prepared by microencapsulation $Pb(Mg_{1/3}Nb_{2/3})O_3$ synthesis. (6) 1581
Mosher, Paul See Heredia, Fernando E.
Moss, Thomas S., III See Besmann, Theodore M.
Mottet, Bruno; Pichavant, Michel; Bény, Jean-Michel; and Alary, Jean-André
Morphology of zirconia synthesized hydrothermally from zirconium oxychloride. (9) 2515
Motzfeldt, Ketil See Wallenberger, Frederick T.
Moya, José S. See Wohlfromm, Hans
Muan, Arnulf
Equilibrium relations in the system NiO–TiO_2 in the temperature range 1300° to 1750°C. (6) 1357; Reaction between iron oxides and alumina-silica refractories. (6) 1319; See also de Villiers, Johan P. R.; Grutzeck, Michael W.; Pretorius, Eugene B.; Roberts, Nia F.; Schwessinger, William T.; Timuçin, Muharrem; Tsai, Hwan-Tang T.
Müeller, Wolfgang Friedrich See Seifert, Andreas
Muenchausen, Ross See Johnston, Gregory P.
Mukhopadhyay, Sukanya See Jacob, K. T.
Munir, Zuhair A. See Dunmead, Stephen
Munz, Dietrich See Fett, Theo
Muramatsu, Yuji See Zhu, Hai-Yan
Muscat, Daniel; Pugh, Martin D.; Drew, Robin A. L.; Pickup, Helen; and Steele, Don
Microstructure of an extruded β-silicon nitride whisker-reinforced silicon nitride composite. (10) 2713
Myers, Benjamin F.
Effect of water vapor on the release of fission gases from uranium oxycarbide in high-temperature, gas-cooled reactor coated fuel particles. (3) 686
Mysen, Bjorn O. See Lipin, Bruce R.; Ulmer, Gene C.
Nagao, Mahiko See Taguchi, Hideki
Nagasaka, Katsumi See Nogami, Masayuki
Nagasaki, Takanori See Kang, Thae-Khapp
Nagelberg, Alan S. See Antolin, Stanislav
Nagelberg, Alan S.; Antolin, Stanislav; and Urquhart, Andrew W.
Formation of Al_2O_3/metal composites by the directed oxidation of molten aluminum–magnesium–silicon alloys: Part II, Growth kinetics. (2) 455
Nagle, Dennis C. See Krynicki, Joseph W.
Nahass, Paul; Pober, Richard L.; Rhine, Wendell E.; Robbins, William L.; and Bowen, H. Kent
Prediction and explanation of aging shrinkage in tape-cast ceramic green sheets. (9) 2373
Nakajima, Kiichi See Kasuga, Toshihiro
Nakamura, Takashi See Li, Panjian
Nakanishi, Kazuki See Li, Panjian
Nakanishi, Kazuki; Soga, Naohiro; Matsuoka, Hideki; and Ise Norio
Small-angle X-ray scattering study of gelling silica–organic polymer solution: Systems containing poly(sodium styrenesulfonate). (4) 971
Nakano, Satoshi; Ikawa, Hiroyuki; and Fukunaga, Osamu
Synthesis of cubic boron nitride by decomposition of magnesium boron nitride. (1) 240
Nambu, Shinji See Sagala, Djuniadi A.
Nambu, Shinji; Sato, Akinori; and Sagala, Djuniadi
Computer simulation of kinetics of spinodal decomposition in the tetragonal TiO_2–SnO_2 system. (7) 1906
Nan, Y.; Lee, William E.; and James, Peter F.
Crystallization behavior of CaO–P_2O_5 glass with TiO_2, SiO_2, and Al_2O_3 additions. (6) 1641; Crystallization behavior of CaO-P_2O_5 glass with TiO_2, SiO_2, and Al_2O_3 additions—correction. (10) 2918
Naoumidis, Aristides See Bilger, Serge
Nasu, Hiroyuki See Kamiya, Kanichi
Navrotsky, Alexandra See Ellison, Adam J. G.
Nazeri, Azar; and Kahn, Manfred
Preparation of $KTaO_3$ and $KNbO_3$ solid solutions through sol–gel processing. (8) 2125
Neal, Matthew See Halloran, John W.
Nettleship, Ian See Kim, Youn Joong
Nettleship, Ian; Slavick, Kurt G.; Kim, Youn Joong; and Kriven, Waltraud M.
Phase transformations in dicalcium silicate: I, Fabrication and phase stability of fine-grained β phase. (9) 2400
Newnham, Robert E.
Journal editor's comments on papers by Bernard E. Warren. (1) 16; See also Chen, Jayu; Hiremath, Basavaraj; Sugawara, Yutaka
Nichols, Ron See Wiedlocher, David E.
Nicholson, Patrick S. See Sarkar, Partho
Nickel, Hubertus See Bilger, Serge
Niihara, Koichi See Zeng, Jianren
Ninio, Fred See Lim, Cheryl S.
Nishino, Junichi; Ohshio, Shigeo; and Kamata, Kiichiro
Preparation of aluminum-doped zinc oxide films by a normal-pressure CVD method. (12) 3469
Nixon, Robert D.; and Davis, Robert F.
Diffusion-accommodated grain boundary sliding and dislocation glide in the creep of sintered alpha silicon carbide. (7) 1786
Nixon, Thomas D.; and Cawley, James D.
Oxidation inhibition mechanisms in coated carbon–carbon composites. (3) 703
Nogami, Masayuki; Nagasaka, Katsumi; and Suzuki, Toshiharu
Sol–gel synthesis of cadmium telluride-microcrystal-doped silica glasses. (1) 220
Norby, Truls; Dyrlie, Oddvar; and Kofstad, Per
Protonic conduction in acceptor-doped cubic rare-earth sesquioxides. (5) 1176
Norton, M. Grant; Cracknell, Kathryn P. B.; and Carter, C. Barry
Pulsed-laser deposition of barium titanate thin films. (7) 1999
Notis, Michael R. See Bateman, Charles A.
Nuñez, Guillermo See Castro, Miriam S.
Nutt, Steven R. See Brennan, John J.
Nygen, Mats See Ekström, Thommy; Persson, Jeanette
Ober, Chris K. See Martin, M. Hogan E.
Ocaña, Manuel; García-Ramos, Jose V.; and Serna, Carlos J.
Low-temperature nucleation of rutile observed by Raman spectroscopy during crystallization of TiO_2. (7) 2010
Ochi, Yasuo; and Maekawa, Masashi
Effects of surface modification of calcined PLZT powder on optical transparency. (5) 1290
Oda, Kiichi See Mizuta, Hiroyuki
Ogasahara, Satoru See Hirano, Shin-ichi
Ogawa, Toru; Fukuda, Kousaku; Kashimura, Satoru; Tobita, Tsutomu; Kobayashi, F.; Kado, Shigeo; Miyanishi, Hideshi; Takahashi, Ishio; and Kikuchi, Teruo
Performance of ZrC-coated particle fuel in irradiation and postirradiation heating tests. (11) 2985
Ogbuji, Linus U. J. T.
Role of Si_2N_2O in the passive oxidation of chemically-vapor-deposited Si_3N_4. (11) 2995
Ogiso, Ko-ji See Hirano, Shin-ichi
Oh, Ki-Young; Saito, Yutaka; Furuta, Atsushi; and Uchino, Kenji
Piezoelectricity in the field-induced ferroelectric phase of lead zirconate-based antiferroelectrics. (4) 795
Oh, S. Hoon See Jang, Hyun M.
Ohara, Yoshinobu; Koumoto, Kunihito; and Yanagida, Hiroaki
Effect of crystal-axis orientation on resonance mode of $BaTiO_3$ ceramics. (6) 1674
Ohashi, Yasuo See Kobayashi, Yuichi
Ohira, Osamu See Kobayashi, Yuichi
Ohji, Tatsuki; and Yamauchi, Yukihiko
Long-term tensile creep testing for advanced ceramics. (8) 2304
Ohki, Tomohiro See Komatsu, Takayuki
Ohland, Matthew See Huang, Jung-Sheng
Ohno, Hideo See Kang, Thae-Khapp
Ohno, Satoru See Sakka, Yoshio
Ohshima, Kazuyuki See Mizuta, Hiroyuki
Ohshio, Shigeo See Nishino, Junichi
Ohtsu, Hidehiko See Yoshino, Yuichi
Ohtsuki, Chikara See Li, Panjian
Ohya, Yutaka; Hoffmann, Michael J.; and Petzow, Günter
Sintering of in-situ synthesized SiC–TiB_2 composites with improved fracture toughness. (9) 2479
Okada, Kiyoshi See Ban, Takayuki
Okada, Yoshihiko See Ishida, Hideki
Okasaka, Kensuke See Kamiya, Kanichi
Okuwaki, Akitsugu See Sato, Tsugio
Okuyama, Masahiko; Fukui, Toshimi; and Sakurai, Chihiro
Effects of complex precursors on alkoxide-derived cordierite powder. (1) 153
Olsson, Mårten See Giannakopoulos, Antonios E.
Onitsuka, Katsuhiko See Sugawara, Yutaka
Onodera, Yoshiro See Sato, Tsugio
Orenstein, Robert M.; and Green, David J.
Thermal shock behavior of open-cell ceramic foams. (7) 1899
Osborn, E. F.
Arnulf Muan. (6) 1317
Oscroft, Robert J.; and Thompson, Derek P.
Influence of oxygen on the formation of aluminum silicon carbide. (1) 224
Ostreicher, Kim J. See Sung, Changmo
Ostvoll, Arnfinn See Lewis, Gladius
Ota, Rikuo See Wakasugi, Takashi
Ota, Toshitaka See Yamai, Iwao
Ota, Toshitaka; Yamai, Iwao; and Takahai, Junichi
Positive-temperature-coefficient effect in graphite–cristobalite composites. (7) 1772
Owate, Israel O.; and Freer, Robert
Thermochemical etching method for ceramics. (5) 1266
Ownby, P. Darrell See Shen, Jyung-Lyang
Ownby, P. Darrell; Yang, Xi; and Liu, Jenq
Calculated X-ray diffraction data for diamond polytypes. (7) 1876
Padture, Nitin P.; and Chan, Helen M.
Improved flaw tolerance in alumina containing 1 vol% anorthite via crystallization of the intergranular glass. (7) 1870
Page, Richard A. See Blanchard, Cheryl R.; Chan, Kwai S.
Pai, Chul-Hoon; Sasaki, Yasuhiro; Kuomoto, Kunihito; and Yanagida, Hiroaki
Reaction sintering of polycarbosilane-impregnated compact of silicon carbide hollow particles and the resultant thermoelectric properties—correction. (2) 479
Paiva Santos, Carlos O. See Zaghete, Maria A.
Pak, Sung S.; Montgomery, Fred C.; Duggan, D. M.; Chen, K. C.; Mazdiyasni, K. S.; Tsai, Patricia K.; Paulius, Lisa M.; and Maple, M. Brian
Solution-condensed $YBa_2Cu_3O_{7-x}$ superconductor thin films from thermosetting metal-organic precursors. (8) 2268

Pan, Wuyi; Yue, Cheng-Feng; and Tosyali, Ogus
Fatigue of ferroelectric polarization and the electric field induced strain in lead lanthanum zirconate titanate ceramics. (6) 1534
Pandey, Lakshman See Parkash, Om
Papiernik, Renée See Renoult, Olivier
Pappis, J. See Kingery, W.D.
Paretzkin, Boris See Hill, Michael D.
Parish, Mark See Halloran, John W.
Park, Dong S. See Ip, Sik Y.
Park, Dong Soo; Danyluk, Steven; and McNallan, Michael J.
Influence of tribochemical reaction products on friction and wear of silicon nitride at elevated temperatures in reactive environments. (11) 3033
Park, Hee Dong See Luthra, Krishan L.
Park, Hyun See Halloran, John W.
Park, Sang-Yeup; Choi, Kyoon; Kang, Suk-Joong L.; and Yoon, Duk N.
Shape of $MgAl_2O_4$ grains in a CaMgSiAlO glass matrix. (1) 216
Parkash, Om; Tewari, Hari S.; Tare, Vasudeo B.; Kumar, Devendra; and Pandey, Lakshman
Study of electrical conduction behavior of the system $La_{1-x}Na_xCo_{1-x}Nb_xO_3$ ($x \geq 0.50$). (11) 3141
Parraud, Stephen; Hubert-Pfalzgraf, Liliane G.; and Floch, Hervé G.
Stabilization and characterization of nanosized niobium and tantalum oxide sols—Optical applications for high-powder lasers. (8) 2289
Parry, Edward E. See Mackert, J. Rodway, Jr.
Parthasarathy, Triplicane A.; Mah, Tai-Il; and Keller, Kristen
Creep mechanism of polycrystalline yttrium aluminum garnet. (7) 1756
Pasquevich, Daniel M. See Gamboa, Julio Andrade
Pathare, Viren See Halloran, John W.
Patil, Kashinath C. See Manoharan, S. Sundar
Patterson, Burton R. See Liu, Yixiong
Paulius, Lisa M. See Pak, Sung S.
Payne, David A. See Desu, Seshu B.; Lakeman, Charles D.E.
Pechenik, Alexander; Piermarini, Gasper J.; and Danforth, Stephen C.
Fabrication of transparent silicon nitride from nanosize particles. (12) 3283
Peitersen, Laura See Ewing, Kenneth J.
Pelino, Mario See Cantalini, Carlo
Pena, Pilar See Wohlfromm, Hans
Perdigão, João M. See Ferreira, António R.
Persad, Chadee See Agarwala, Mukesh K.
Persson, Jeanette; Käll, Per-Olov; and Nygren, Mats
Interpretation of the parabolic and nonparabolic oxidation behavior of silicon oxynitride. (12) 3377
Petranović, Nada See Takalčec, Emilija
Petrovic, John J. See Bhattacharya, Arun K.; Wade, Robert K.
Petry, M. Dennis See Mah, Tai-Il
Petzow, Günter See Ohya, Yutaka
Pezzotti, Giuseppe See Tanaka, Isao
Pharr, George M. See Raj, Sai V.
Pichavant, Michel See Mottet, Bruno
Pickup, Helen See Muscat, Daniel
Piekarczyk, Jan See Haberko, Krzysztof
Piepel, Gregory F.; and Shade, John W.
In situ vitrification and the effects of soil additives—A mixture experiment case study. (1) 112
Piermarini, Gasper J. See Pechenik, Alexander
Pijolat, Michèle See Gruy, Frédéric
Pilgrim, Steven M.; Massuda, Mona; Prodey, Jackie D.; and Ritter, Andrew P.
Electromechanical properties of some $Pb(Mg_{1/3}Nb_{2/3})O_3$–$PbTiO_3$–(Ba,Sr)TiO_3 Ceramics: I. (7) 1964
Pilgrim, Steven M.; Massuda, Mona; and Sutherland, Audrey E.
Electromechanical determination of the high-field phase transition of $Pb(Mg_{1/3}Nb_{2/3})O_3$–$PbTiO_3$–(Ba,Sr)TiO_3 relaxor ferroelectrics. (7) 1970
Plovnick, Ross H.; and Kiggans, James O.
Microwave thermal etching of stabilized zirconia. (12) 3462
Pober, Richard L. See Nahass, Paul
Pompe, Robert See Sjöberg, Jörgen
Ponton, Clive B. See Wang, Jia G.
Porter, J. R. See Dauskardt, Reinhold H.
Porter, Wally D. See Martin, M. Hogan E.
Porz, Franz See Gogotsi, Yury G.
Potdar, Hari S. See Deshpande, Subhash B.
Potter, Gregg E.; Knudsen, Arne K.; Tou, James C.; and Choudhury, Ashok
Measurement of the oxygen and impurity distribution in polycrystalline aluminum nitride with secondary ion mass spectrometry. (12) 3215
Powers, James D.; and Glaeser, Andreas M.
High-temperature healing of cracklike flaws in Mg- and Ca-ion-implanted sapphire. (9) 2547
Prasadarao, Alamanda V. See Selvaraj, Ulagaraj
Prasadarao, Alamanda V.; Selvaraj, Ulagaraj; Komarneni, Sridhar; and Bhalla, Amar S.
Sol–gel synthesis of strontium pyroniobate and calcium pyroniobate. (10) 2697
Prasadarao, Alamanda V.; Selvaraj, Ulagaraj; Komarneni, Sridhar; Bhalla, Amar S.; and Roy, Rustum
Enhanced densification by seeding of sol-gel-derived aluminum titanate. (6) 1529
Pratsinis, Sotiris E. See Akhtar, M. Kamal; Hashman, Thomas W.
Preston, Frank W.
Strength of bottles as affected by limitations of manufacturing processes. (10) 2635
Pretorius, Eugene B.; and Muan, Arnulf
Activity-composition relations in platinum–chromium and platinum–vanadium alloys at 1500°C. (6) 1361; Activity-compositions relations of chromium oxide in silicate melts at 1500°C under strongly reducing conditions. (6) 1364; Activity of nickel(II) oxide in silicate melts. (6) 1490; Stability of $CaNiSi_2O_6$ ("Niopside") and activity–composition relations of $CaMgSi_2O_6$–$CaNiSi_2O_6$ solid solutions at 1350°C. (6) 1458
Pretorius, Eugene B.; Snellgrove, R.; Muan, Arnulf
Oxidation state of chromium in CaO–Al_2O_3–CrO_x–SiO_2 melts under strongly reducing conditions at 1500°C. (6) 1378
Prodey, Jackie D. See Pilgrim, Steven M.
Pugh, Martin D. See Muscat, Daniel
Purdy, Gary R. See Arita, Irene H.
Pyda, Waldemar See Haberko, Krzysztof
Qiang, Di See Cheng, Humin
Rabenberg, L. See Dutta, I.
Rabin, Barry H.
Joining of silicon carbide/silicon carbide composites and dense silicon carbide using combustion reactions in the titanium–carbon–nickel system. (1) 131
Rahaman, Mohamed N. See Dutton, Rollie E.; Fan, Chen-Lung; Hu, Ching-Li
Raj, Sai V.; and Pharr, George M.
Effect of temperature on the formation of creep substructure in sodium chloride single crystals. (2) 347
Ramachandran, N. See Tsai, Jing-Fong
Rao, Shyam S.; Tsakalakos, Thomas; and Cannon, W. Roger
Stress distributions in ceramic composites containing faceted inclusions. (7) 1807
Rasmussen, Don H. See Albaugh, Kevin B.
Ravi, V.; and Kutty, T. R. N.
A novel method for the uniform incorporation of grain-boundary layer modifiers in positive temperature coefficient of resistivity barium titanate. (1) 203
Ray, Siba P.
Preparation and characterization of aluminum borate. (9) 2605
Readey, Michael
Formation and sintering characteristics of aluminum borate whiskers. (12) 3452
Recio, Paloma See Durán, Pedro
Reece, Michael J. See Guiu, Frank
Reed, James S. See Zheng, Jingmin
Reizen, Kouji See Iwanaga, Hiroshi
Renoult, Olivier; Boilot, Jean-Pierre; Chaput, Frédéric; Papiernik, Renée; Hubert-Pfalzgraf, Liliane G.; and Lejeune, Martine
Sol–gel processing and microwave characteristics of $Ba(Mg_{1/3}Ta_{2/3})O_3$ dielectrics. (12) 3337
Requena, Joaquín See Wohlfromm, Hans
Resasco, Daniel E. See Castro, Miriam S.
Reynolds, James R. See Cutler, Raymond A.
Rhine, Wendell E. See Nahass, Paul
Rhodes, William H. See Sung, Changmo
Richet, Pascal See Têqui, Christophe
Rifflet, Jean Claude See Gervais, Monique
Rigtrup, Kevin M. See Cutler, Raymond A.
Riman, Richard E. See Mort, Paul R.
Ring, Terry A. See Chen, Zhien-Chi
Ringle, Robert D. See Mackert, J. Rodway, Jr.
Ritchie, R. O. See Dauskardt, Reinhold H.
Ritter, Andrew P. See Pilgrim, Steven M.
Ritter, John E.; Jakus, Karl; Godin, Michael H.; and Ruh, Robert
Comparison of high-temperature crack growth in SiC-whisker-reinforced mullite and Si_3N_4. (7) 1760
Roach, Raymond P. See Weimer, Alan W.
Robbins, William L. See Nahass, Paul
Roberts, Nia F.; and Muan, Arnulf
Liquid-solid equilibria in the system NiO–TiO_2–SiO_2 in the temperature range 1430° to 1660°C. (6) 1382
Robison, Jennifer L. See Seyferth, Dietmar
Rockett, Thomas J. See Sahba, Nazanin
Rodriguez, Juan M. See Durán, Pedro
Rodriguez, Mark A. See Dwivedi, Anurag
Rogers, Robert A. See Sharma, Ram A.
Rogl, Peter See Klesnar, Helmuth
Rokhlin, Stanislav I. See Hefetz, Meir
Roques-Carmes, Claude See Baran, George R.
Rosén, Erik See Lundberg, Mats
Rosenberg, Zvi See Bless, Stephan J.
Rossman, George R. See Shannon, Robert D.
Roth, Don J.; DeGuire, Mark R.; and Dolhert, Leonard E.
Ultrasonic evaluation of oxygen content, modulus, and microstructure changes in $YBa_2Cu_3O_{7-x}$ occurring during oxidation and reduction. (5) 1182
Routbort, Jules L. See Fisher, Edward S.
Rouxel, Tanguy; Wakai, Fumihiro; and Izaki, Kansei
Tensile ductility of superplastic Al_2O_3–Y_2O_3–Si_3N_4/SiC composites. (9) 2363
Roy, Amitava; Schilling, Paul J.; Eaton, Harvill C.; Malone, Philip G.; Brabston, W. Newell; and Wakeley, Lillian D.
Activation of ground blast-furnace slag by alkali-metal and alkaline-earth hydroxides. (12) 3233
Roy, Rustum
Aids in hydrothermal experimentation: II, Methods of making mixtures for both "dry" and "wet" phase equilibrium studies. (11) 2931; See also Liu, Chunling; Prasadarao, A. V.; Selvaraj, Ulagaraj
Ruano, Oscar A.; Wolfenstien, Jeffrey; Wadsworth, Jeffrey; and Sherby, Oleg D.
Harper-Dorn and power-law creep in single-crystalline magnesium oxide. (7) 1737
Ruh, Robert See Ritter, John E.; Zangvil, Avigdor
Ruh, Robert; Donaldson, Kimberly Y.; and Hasselman, D. P. H.
Thermal conductivity of boron carbide–boron nitride composites. (10) 2887
Ruh, Robert; Kearns, Michael; Zangvil, Avigdor; and Xu Youren
Phase and property studies of boron carbide–boron nitride composites. (4) 864
Rühle, M. See Szabó, D. V.
Ruller, Jacqueline A.; and Friebele, E. Joseph
Evidence of secondary-phase separation in an alkali borosilicate glass. (4) 1026
Rundgren, Kent See Falk, Lena K. L.
Rushan, Han See Wang, Qiang
Rusin, Richard P. See Hansen, James D.
Russo, Charles J.; Harmer, Martin P.; Chan, Helen M.; and Miller, Gary A.
Design of a laminated ceramic composite for improved strength and toughness. (12) 3396
Safari, Ahmad See Waller, David J.
Sagala, Djuniadi A. See Nambu, Shinji
Sagala, Djuniadi A.; and Nambu, Shinji
Microscopic calculation of dielectric loss at microwave frequencies for complex perovskite $Ba(Zn_{1/3}Ta_{2/3})O_3$. (9) 2573
Sahba, Nazanin; and Rockett, Thomas J.
Infrared absorption coefficients of silica glasses. (1) 209
Saito, Yasutoshi See Suematsu, Hisayuki
Saito, Yutaka See Oh, Ki-Young
Saitoh, Masahiro See Hirano, Shin-ichi
Sakaguchi, Isao; Yurimoto, Hisayoshi; and Sueno, Shigeho
Calcium diffusion along high-diffusivity paths in single-crystal MgO. (3) 712; Strontium and silicon simultaneous diffusion in single-crystal MgO. (12) 3477
Sakai, Kazuo See Sata, Toshiyuki
Sakka, Yoshio; Ohno, Satoru; and Uda, Masahiro
Oxidation and degradation of titanium nitride ultrafine powders exposed to air. (1) 244
Sakurai, Chihiro See Okuyama, Masahiko
Sale, Frank R. See Wang, Hong-Wen
Salem, Jonathan A. See Choi, Sung R.
Saltzberg, Michael A.; Bors, Susan L.; Bergna, Horacio; and Winchester, Steven C.
Synthesis of chemically stablized cristobalite. (1) 89
Sample, David; and Brown, Paul W.
Hydration of tricalcium germanate–tricalcium silicate solid solutions. (11) 3070
Sanders, William A. See Cheong, Deock-Soo; Choi, Sung R.
Sandlin, Michael S.; Lee, Farnjeng; and Bowman, Keith J.
Simple geometric model for assessing whisker orientation in axisymmetric SiC-whisker-reinforced composites. (6) 1522
Sarkar, Partho; Haung, Xuening; and Nicholson, Patrick S.
Structural ceramic microlaminates by electrophoretic deposition. (10) 2907
Sasaki, Kaori See Ishida, Hideki; Mitsuda, Takeshi
Sasaki, Yasuhiro See Pai, Chul-Hoon
Sasaki, Yoshinori See Abe, Yoshiyuki
Sata, Toshiyuki; Sakai, Kazuo; and Tashiro, Suguru
Vapor pressures of bismuth, lead, and copper components in $Bi_2Sr_{1.7}CaCu_2O_y$ and $Bi_{1.7}Pb_{0.3}Sr_{1.7}Ca_2Cu_3O_y$ superconductor ceramics. (4) 805

Sathyamoorthy, Rengaswamy; Virkar, Anil V.; and Cutler, Raymond A.
Damage-resistant SiC–AlN layered composites with surface compressive stresses. (5) 1136
Sato, Akinori See Nambu, Shinji
Sato, Ryuji See Komatsu, Takayuki
Sato, Tsugio; Dosaka, Kenji; Yoshioka, Toshiaki; Okuwaki, Akitsugu; Torii, Kazuo; and Onodera, Yoshiro
Sintering of ceria-doped tetragonal zirconia crystallized in organic solvents, water, and air. (3) 552
Saugnac, Frédéric; Teyssandier, Francis; and Marchand, André
Characterization of C-B-N solid solutions deposited from a gaseous phase between 900° and 1050°C. (1) 161
Savage, Stuart B. See Hampton, J. Holly D.
Sawai, Sumiichi See Kondo, Ken-ichi
Sawyer, Larry D. See Harris, Daniel C.
Sbaizero, Orfeo See Schmid, Chiari
Scardi, Paolo; Di Maggio, Rosa; Lutterotti, Luca; and Maistrelli, Paul
Thermal expansion anisotropy of ceria-stabilized tetragonal zirconia. (10) 2828
Scarlett, Brian See Kruis, Frank Einar
Scattergood, Ronald O. See Smith, Stanley M.
Schara, Milan See Mitrič, Breda
Scheel, Hans Jörg See Berkowski, Marek
Scherer, George W.
Editorial comments on a paper by Gordon S. Fulcher. (5) 1060
Scheri, Richard C. See Harris, Daniel C.
Schilling, Christopher H. See Bergström, Lennart
Schilling, Paul J. See Roy, Amitava
Schmid, Chiari; Sbaizero, Orfeo; Sergo, Valter; and Meriani, Sergio
Shape memory-like effect phenomena in a Ce-TZP/Al_2O_3 composite. (7) 2003
Schoonman, Joop See Kruis, Frank Einar
Schubring, Norm W. See Catalan, Antonio B.
Schulze, Walter, A. See Wu, Kaiwen
Schwessinger, William T.; and Muan, Arnulf
Spinel–silicate equilibria in the system MgO–FeO–Fe_2O_3–Al_2O_3–Cr_2O_3–SiO_2. (6) 1390
Seifert, Andreas; Berger, Axel; and Müller, Wolfgang Friedrich
TEM of dislocatons in AlN. (4) 873
Selvaraj, Ulagaraj See Prasadarao, Alamanda V.
Selvaraj, Ulagaraj; Prasadarao, Alamanda V.; Komarneni, Sridhar; and Roy, Rustum
Sol–gel fabrication of epitaxial and oriented TiO_2 thin films. (5) 1167
Šenija, Davor See Tkalčec, Emilija
Sergio, Valter See Schmid, Chiari
Serna, Carlos J. See Ocaña, Manuel
Seyferth, Dietmar; Wood, Timothy G.; Tracy, Henry J.; and Robison, Jennifer L.
Near-stoichiometric silicon carbide from an economical polysilane precursor. (5) 1300
Shade, John W. See Piepel, Gregory F.
Shannon, Robert D.; Mariano, Anthony N.; and Rossman, George R.
Effect of H_2O and CO_2 on dielectric properties of single-crystal cordierite and comparison with polycrystalline cordierite. (9) 2395
Shaoqiu, Tang; Zhongjun, Liang; and Guorong, Chen
Studies of the crystallization of antimony-containing slag glass-ceramic. (2) 440
Shapiro, Michael See Litovsky, Efim Ya.
Sharma, Ram A.; and Rogers, Robert A.
Phase equilibria and structural species in $NdCl_3$–NaCl, $NdCl_3$–$CaCl_2$, $PrCl_3$–NaCl, and $PrCl_3$–$CaCl_2$ systems. (9) 2484
Sharma, Shiv K. See Markgraf, Steven A.
Shaw, Michael C. See Yu, Cheng-Sheng
Shaw, Michael C.; Marshall, David B.; Heuer, Arthur H.; and Inghels, Eric
Recovery of crack-tip transformation zones in zirconia after high-temperature annealing. (2) 474
Shelby, James E. See Jewell, John M.
Sheldon, Brian W. See Besmann, Theodore M.
Sheldon, Brian W.; and Besmann, Theodore M.
Reaction and difusion kinetics during the initial stages of isothermal chemical vapor infiltration—correction. (3) 734
Sheldon, Brian W.; Szekely, Julian; and Haggerty, John S.
Formation of reaction-bonded silicon nitride from silane-derived silicon powders: Macroscopic kinetics and related transport phenomena. (3) 677
Shelleman, David L. See Jadaan, Osama M.
Shen, Jyun-Lyang; Howard, Scott A.; Liu, Jenq; and Ownby, Darrell P.
Quantitative analysis of the crystalline phases in β″-alumina-based solid electrolytes using X-ray powder diffraction. (1) 52
Sherby, Oleg D. See Ruano, Oscar A.
Shetty, Dinesh K. See Chao, Luen-Yuan; Tsai, Jing-Fong; Yu, Cheng-Sheng
Sheu, Tzer-Shin; Tien, Tseng-Yin; and Chen, I-Wei
Cubic-to-tetragonal (t′) transformation in zirconia-containing systems. (5) 1108
Sheu, Yu-Cheng See Chung, Shyan-Lung
Shibasaki, Yasuo See Mizuta, Hiroyuki
Shibata, Takashi See Yoshino, Yuichi
Shih, C. James See Lin, Wai
Shimada, Shiro; Inagaki, Michio; and Matsui, Kunihito
Oxidation kinetics of hafnium carbide in the temperature range of 480° to 600°C. (10) 2671
Shinozaki, Kazuo See Lu, Chung-Hsin
Shouhong, Tan See Dongliang, Jiang
Shukla, A. K. See Jacob, K. T.
Sigel, George H., Jr. See Heo, Jong
Silvi, Bernard; Allevena, Marcel; Hannachi, Yacine; and D'Arco, Philippe
Pseudopotential periodic Hartree-Fock study of the cristobalite phases of silica and germanium dioxide. (5) 1239
Simms, Frederick E. See Huang, Jow-Lay
Sjöberg, Jörgen; and Pompe, Robert
Nitridation of amorphous silica with ammonia. (8) 2189
Slamovich, Elliott B.; and Lange, Frederick F.
Densification of large pores: I, Experiments. (9) 2498
Slavick, Kurt G. See Nettleship, Ian
Smith, Douglas M. See Johnston, Gregory P.; Moore, Katherine A.
Smith, Douglas T. See Wan, Kai-Tak
Smith, Peter A.; and Haber, Richard A.
Reformulation of an aqueous alumina slip based on modification of particle-size distribution and particle packing. (2) 290
Smith, Stanley M.; and Scattergood, Ronald O.
Controlled crack shapes for indentation fracture of soda–lime glass. (9) 2593; Crack-shape effects for indentation fracture toughness measurements. (2) 305
Snellgrove, R. See Pretorius, Eugene B.
Socie, Darrell F. See Lin, Chih-Kuang Jack
Soga, Naohiro See Hanada, Teiichi; Li, Panjian; Nakanishi, Kazuki; Tanabe, Setsuhisa
Solomon, Alvin A. See Xu, Antai
Sommer, Burkhard See Kaiser, Arno
Sommers, James A. See Ewing, Kenneth J.
Son, Geonseog See Kim, Kitae T.
Sornakumar, T. See Annamalai, V. E.
Spear, Karl E. See Butt, Darryl P.
Spearing, S. Mark See Beyerle, Douglas S.; Heredia, Fernando E.
Sridharan, Srinivasan See Tomozawa, Minoru
Srinivasan, Ramakrishnan See Burns, S. J.
Srinivasan, Ram; Davis, Burtron H.; Cavin, O. Burl; and Hubbard, Camden R.
Crystallization and phase transformation process in zirconia: An in situ high-temperature X-ray diffraction study. (5) 1217
Stack, Ken See Burns, S. J.
Standish, Nicholas See Yu, Ai-Bing
Stebbins, Jonathan F.; Farnan, Ian; Dando, Neal; and Tzeng, Shih-Ying
Solids and liquids in the NaF–AlF–Al_2O_3 system: A high-temperature NMR study. (11) 3001
Steele, Don See Muscat, Daniel
Steif, Paul S.; and Dollar, Anna
Models of fiber-matrix interfacial debonding. (6) 1694
Stevens, Ronald See Chen, Yan Lin
Strife, James R. See Lee, Woo Y.
Stump, David M.
Edge-crack resistance curves in supercritical ceramics. (4) 889; Ultimate strengths of partially stabilized zirconia ceramics. (5) 1264
Subramanian, Ramesh; and Dieckmann, Rüdiger
Limits of the thermodynamic stability of cobalt–iron–manganese mixed oxides at 1200°C. (2) 382
Sudre, Olivier; Bao, Gang; Fan, Bo; Lange, Fred F.; and Evans, Anthony G.
Effect of inclusions on densification: II, Numerical model. (3) 525
Sudre, Olivier; and Lange, Fred F.
Effect of inclusions on densification: I, Microstructural development in an Al_2O_3 matrix containing a high volume fraction of ZrO_2 inclusions. (3) 519; The effect of inclusions on densification: III, The desintering phenomenon. (12) 3421
Suematsu, Hisayuki; Iseki, Takayoshi; Yano, Toyohiko; Saito, Yasutoshi; Suzuki, Tetsuya; and Mori, Tsutomu
Point defect hardening in $MgO \cdot 3Al_2O_3$. (7) 1742
Sueno, Shigeho See Sakaguchi, Isao
Suga, Tadatomo See Kikuchi, Masao
Sugama, Toshifumi; Allan, Marita; and Hill, Janet M.
Calcium phosphate cements prepared by acid–base reaction. (8) 2076
Sugawara, Yutaka; Onitsuka, Katsuhiko; Yoshikawa, Shoko; Xu, Qichang; Newnham, Robert E.; and Uchino, Kenji
Metal–ceramic composite actuators. (4) 996
Suh, Jeong See Kim, Kitae T.
Sui, Zhi Tong See Tu, Gan Feng
Sujata, K.; and Jennings, Hamlin M.
Formation of a protective layer during the hydration of cement. (6) 1669
Sujata, K.; and Mason, Thomas O.
Kinetics of cation redistribution in ferrospinels. (3) 557
Summerfelt, Scott R.; and Carter, C. Barry
Kinetics of $NiFe_2O_4$ precipitation in NiO. (8) 2244
Sun, Hong-Tao See Chu, Fan
Sun, Hongtao; Zhang, Liangying; and Yao, Xi
Calculation of ultraslow dielectric relaxation of doped $BaTiO_3$ ceramics. (9) 2379
Sunder, Swaminathan See Garg, Diwakar
Sung, Changmo; Wei, George C.; Ostreicher, Kim J.; and Rhodes, William H.
Segregation of magnesium to the internal surface of residual pores in translucent polycrystalline alumina. (7) 1796
Sung, Gun Yong See Kim, Hong-Soo
Susnitzky, David W.; and Carter, C. Barry
Surface morphology of heat-treated ceramic thin films. (9) 2463
Sutherland, Audrey E. See Pilgrim, Steven M.
Suttor, Daniel; and Fischman, Gary S.
Densification and sintering kinetics in sintered silicon nitride. (5) 1063
Suzuki, Ryosuke O.; Bohac, Petr; and Gauckler, Ludwig J.
Thermodynamics and phase equilibria in the Sr–Cu–O system. (10) 2833
Suzuki, Shigenobu See Kikuchi, Masao
Suzuki, Tetsuya See Mori, Tsutomu; Suematsu, Hisayuki
Suzuki, Toshiharu See Nogami, Masayuki
Swab, Jeffrey J.; and Leatherman, Gary L.
Static-fatigue life of Ce-TZP and Si_3N_4 in a corrosive environment. (3) 719
Swain, Michael V. See Becher, Paul F.; Dukino, Rodney D.; Lutz, Ekkehard, H.
Swartzfager, Dennis G. See Wallenberger, Frederick T.
Syskakis, Emmanuel See Bilger, Serge
Szabó, D. V.; Campbell, G. H.; Brukely, J.; Hoffmann, M. J.; Rühle, M.
Heterogeneous nucleation in the intergranular phase of a SiAlON. (1) 249
Szekely, Julian See Sheldon, Brian W.
Tabata, Masahiro See Kodama, Tatsuya
Taguchi, Hideki; Matsuda, Daisuke; Nagao, Mahiko; Tanihata, Kimiaki; and Miyamoto, Yoshinari
Synthesis of perovskite-type $(La_{1-x}Sr_x)MnO_3$ ($0 \le x \le 0.3$) at low temperature. (1) 201
Tai, Lone-Wen; Anderson, Harlan U.; and Lessing, Paul A.
Mixed-cation oxide powders via resin intermediates derived from a water-soluble polymer. (12) 3490
Taimatsu, Hitoshi; Wada, Keiji; Kaneko, Hiroyuki; and Yamamura, Hiroshi
Mechanism of reaction between lanthanum manganite and yttria-stabilized zirconia. (2) 401
Takagi, Hiroyoshi See Awano, Masanobu
Takagi, Touichi See Chiang, Yet-Ming
Takahashi, Ishio See Ogawa, Toru
Takahashi, Junichi See Ota, Toshitaka
Takahashi, Yoshihide See Kitaoka, Satoshi
Takahashi, Yutaka See Kikuchi, Masao
Takamori, Takeshi See Tomozawa, Minoru
Takata, Masasuke See Huybrechts, Ben
Takeuchi, Shin See Iwanaga, Hiroshi
Takita, Yusaku See Ishihara, Tatsumi
Tamaura, Yutaka See Kodama, Tatsuya
Tampieri, Anna; and Bellosi, Alida
Oxidation resistance of alumina–titanium nitride and alumina–titanium carbide composites. (6) 1688
Tamura, Yukito See Mitamura, Hisayoshi
Tanabe, Setsuhisa See Hanada, Teiichi
Tanabe, Setsuhisa; Hirao, Kazuyuki; and Soga, Naohiro
Elastic properties and molar volume of rare-earth aluminosilicate glasses. (3) 503
Tanaka, Isao See Zeng, Jianren
Tanaka, Isao; and Pezzotti, Giuseppe
Delayed-failure resistance of high-purity Si_3N_4 at 1400°C. (4) 1023; Evaluation of slow crack growth resistance in ceramics for high-temperature applications. (4) 772
Tanaka, Shoji See Wada, Takahiro
Tandon, Rajan; and Cook, Robert F.
Cone crack nucleation at sharp contacts. (10) 2877
Tanihata, Kimiaki See Taguchi, Hideki
Tare, Vasudeo B. See Parkash, Om
Tashiro, Suguru See Sata, Toshiyuki

Tatsumisago, Masahiro; Chigusa, Hisashi; Tohge, Noboru; and Minami, Tsutomu
Metal dopants in Bi-Pb-Ca-Sr-Cu-O high T_c superconductor thick films prepared by melt solidification. (1) 231
Taylor, Peter
Peculiar morphology in some phase-separated multicomponent silicate glasses. (5) 1276
Taylor, Raymond L. See Goela, Jitendra S.
Teng, Mao-Hua See Hansen, James D.
Téqui, Christophe; Grinspan, Paul; and Richet, Pascal
Thermodynamic properties of alkali silicates: Heat capacity of Li_2SiO_3 and lithium-bearing melts. (9) 2601
Tewari, Hari S. See Parkash, Om
Teyssandier, Francis See Saugnac, Frédéric
Thevenot, François See Xu, Youren
Thomas, Gareth See Callahan, Daniel L.; Cinibulk, Michael K.
Thompson, A. Mark; and Harmer, Martin P.
Deterioration of a classical final-stage microstructure: A study in alumina. (4) 976
Thompson, Derek P. See Oscroft, Robert J.
Tian, Qiang See Chen, Jong
Tien, Tseng-Yin See Sheu, Tzer-Shin
Tietz, Lisa A.; and Carter, C. Barry
Imaging and diffraction study of continuous α-Fe_2O_3 films on $(0001)Al_2O_3$. (5) 1097
Timuçin, Muharrem; and Muan, Arnulf
Activity–composition relations in $NiAl_2O_4$–$MnAl_2O_4$ solid solutions and stabilities of $NiAl_2O_4$ and $MnAl_2O_4$ at 1300° and 1400°C. (6) 1399
Ting, Su-Jen See Lin, Wai
Tissot, Ralph G. See Aselage, Terry L.
Tkalčec, Emilija; Šenlja, Davor; Dondur, Vesna; and Petranović, Nada
Influence of dopants on nucleation and growth of high-quartz solid solution in lithium aluminosilicate glass. (7) 1958
Tobita, Tsutomu See Ogawa, Toru
Togashi, Yoshihiro See Mitamura, Hisayoshi
Tohge, Noboru See Tatsumisago, Masahiro
Tominaga, Ken-ichi See Kodama, Tatsuya
Tomozawa, Minoru; Sridharan, Srinivasan; and Takamori, Takeshi
Origin of viscosity increase of phase-separated borosilicate glasses. (11) 3103
Torri, Kazuo See Sato, Tsugio
Tosyali, Ogus See Pan, Wuyi
Tou, James C. See Potter, Gregg E.
Tracy, Henry J. See Seyferth, Dietmar
Tragut, Christian See Fleischer, Maximilian
Tressler, Richard E. See Butt, Darryl P.; Darroudi, Taghi; Jadaan, Osama M.
Tsai, Hwan-Tang T.; and Muan, Arnulf
Activity–composition relations in $FeCr_2O_4$–$FeAl_2O_4$ and $MnCr_2O_4$–$MnAl_2O_4$ solid solutions at 1500° and 1600°C. (6) 1407; Activity–composition relations in refractory oxide solid solutions at high temperatures: The system Cr_2O_3–Al_2O_3. (6) 1412; Activity–composition relations in the systems CaO–MnO and MgO–MnO at 1500° and 1600°C. (6) 1472
Tsai, Jing-Fong; Chon, Uong; Ramachandran, N.; and Shetty, Dinesh K.
Transformation plasticity and toughening in CeO_2-partially-stabilized zirconia–alumina (Ce-TZP/Al_2O_3) composites doped with MnO. (5) 1229
Tsai, Ming-Shyong See Chung, Shyan-Lung
Tsai, Patricia K. See Pak, Sung S.
Tsai, Y. L. See Harris, Daniel C.
Tsakalakos, Thomas See Rao, Shyam S.
Tseng, Tseung-Yuen See Chen, Fueng-Ho; Lee, Yih-Shing
Tseng, Wenjea J.; and Funkenbusch, Paul D.
Microstructure and densification of pressureless-sintered Al_2O_3/Si_3N_4-whisker composites. (5) 1171
Tsunekawa, Shin
Twinning in $YNbO_4$—comment. (4) 1037
Tsuzuki, Kaoru See Yoshikawa, Yoshio
Tu, Gan Feng; Sui, Zhi Tong; Huang, Qiang; and Wang, Chang Zhen
Sol–gel processed Y-PSZ ceramics with 5 wt% Al_2O_3. (4) 1032
Tuchiya, Maki See Kasuga, Toshihiro
Tucker, Dennis S. See Wiedlocher, David E.
Tzeng, Shih-Ying See Stebbins, Jonathan F.
Uchida, Nozomu See Uematsu, Keizo
Uchino, Kenji See Oh, Ki-Young; Sugawara, Yutaka
Uda, Masahiro See Sakka, Yoshio
Ueki, Masanori See Walls, Philip A.
Uematsu, Keizo; Miyashita, Masayori; Kim, Jin-Young; and Uchida, Nozomu
Direct study of the behavior of flaw-forming defect in sintering. (4) 1016
Uenosono, Satoshi See Mitomo, Mamoru
Ueta, Michiko See Komatsu, Takayuki
Ulmer, Gene C. See Lipin, Bruce R.
Ulmer, Gene C.; Elliott, William Crawford; Buntin, Thomas; Erickson, Edwin S., Jr.; and Friel, John J.
Role of selected cations and gas speciation on the reduction of fayalite at 1300°C. (6) 1476
Ulmer, Gene C.; Mysen, Bjorn O.; and Lipin, Bruce R.
Editorial comment on paper by Arnulf Muan. (6) 1331
Uno, Tomoko See Kasuga, Toshihiro
Unuma, Hidero; Miura, Koh; and Kodaira, Kohei
Improvement of mechanical properties of machinable glass-ceramics through postmachining heat treatments. (8) 2300
Urquhart, Andrew W. See Nagelberg, Alan S.
Vahlas, Constantin; and Besmann, Theodore M.
Thermodynamics of the Y-Ba-Cu-C-O-H system: Application to the organometallic chemical vapor deposition of the $YBa_2Cu_3O_{7-x}$ phase. (10) 2679
Vallino, Mario See Mazza, Daniele
Vance, Eric R. See Argyriou, Dimitri N.; Mitamura, Hisayoshi
Vanderah, Terrell A.; and Lowe-Ma, Charlotte K.
Yttrium substitution in CaS. (7) 1988
Van de Voorde, Marcel See Veyret, Jean-Bernard
van Hoek, Johan A. M.; van Loo, Frans, J. J.; Metselaar, Rudi.
Corrosion of alumina by potassium vapor. (1) 109
Van Kirk, Susan E.; and Martin, Steve W.
Preparation and characterization of high-density PbO–Bi_2O_3–B_2O_3 glasses. (4) 1028
van Loo, Frans, J. J. See van Hoek, Johan A. M.
Varela, José A. See Zaghete, Maria A.
Varma, Hari Krishna See Warrier, Krishna Gopa Kumara
Veltri, Richard D. See Lee, Woo, Y.
Venkataraman, Natarajan See Burns, S. J.
Veyret, Jean-Bernard; Van de Voorde, Marcel; and Billy Michel
Oxidation behavior of silicon yttrium oxynitride. (12) 3289
Viljoen, Hendrik J.; and Hlavacek, Vladimir
Temperature oscillations of alternating-current-heated thin filaments in ceramic fiber production. (7) 1997
Virkar, Anil V. See Chen, Jong; Cutler, Raymond A.; Sathyamoorthy, Rengaswamy
Wada, Keiji See Taimatsu, Hitoshi
Wada, Masanori See Kamiya, Kanichi
Wada, Takahiro; Yamauchi, Hisao; and Tanaka, Shoji
Simultaneous thermogravimetry and evolted-gas analysis of $YBa_2Cu_3O_7$ and $LaBa_2Cu_3O_7$ superconductors. (6) 1705
Wade, Robert K.; and Petrovic, John J.
Fracture modes in $MoSi_2$. (6) 1682; Processing temperature effects on molybdenum disilicide. (11) 3160
Wadsworth, Jeffrey See Ruano, Oscar A.
Wakai, Fumihiro See Rouxel, Tanguy
Wakasugi, Takashi; Ota, Rikuo; and Fukunaga, Jiro
Glass-forming ability and crystallization tendency evaluated by the DTA method in the Na_2O–B_2O_3–Al_2O_3 system. (11) 3129
Wakeley, Lillian D. See Roy, Amitava
Wallenberger, Frederick T.; Weston, Norman E.; Motzfeldt, Ketil; and Swartzfager, Dennis G.
Inviscid melt spinning of alumina fibers: Chemical jet stabilization. (3) 629
Waller, David J.; and Safari, Ahmad
Piezoelectric lead zirconate titanate ceramic fiber/polymer composites. (6) 1648
Walls, Philip A.; and Ueki, Masanori
Joining SiAlON ceramics using composite β-SiAlON–glass adhesives. (9) 2491
Wan, Kai-Tak; Smith, Douglas T.; and Lawn, Brian R.
Fracture and contact adhesion energies of mica–mica, silica–silica, and mica–silica interfaces in dry and moist atmospheres. (3) 667
Wang, Chang Zhen See Tu, Gan Feng
Wang, Chuan See Burns, S. J.
Wang, Chuei-Tang; Lin, Lang-Sheng; and Yang, Sheng-Jenn
Preparation of $MgAl_2O_4$ spinel powders via freeze-drying of alkoxide precursors. (8) 2240
Wang, Hong-Wen; Hall, David A.; and Sale, Frank R.
Phase homogeneity and segregation in PZT powders prepared by thermal decomposition of metal–EDTA complexes derived from nitrate and chloride solutions. (1) 124
Wang, Hongyu; Berta, Yolande; and Fischman, Gary S.
Microstructure of silicon carbide whiskers synthesized by carbothermal reduction of silicon nitride. (5) 1080
Wang, Jia
Effect of pressing method on organic burnout. (9) 2627
Wang, Jia G.; Ponton, Clive B.; and Marquis, Peter M.
Effects of green density on crystallization and mullitization in the transiently sintered mullite. (12) 3457
Wang, Ji-Fang See Fisher, Edward S.
Wang, Qiang; Rushan, Han; and Gan, Z. Z.
Relationship between doping and ordering (1/3⟨111⟩ and 1/2⟨111⟩ types) in $A(B^{2+}B^{5+})O_3$ and $A(B^{3+}B^{5+})O_3$ systems. (10) 2881
Wang, Sea Fue; and Huebner, Wayne
Interaction of Ag/Pd metallization with lead and bismuth oxide-based fluxes in multilayer ceramic capacitors. (9) 2339
Wang, Sea Fue; Huebner, Wayne; and Huang, Chi-Yen
Correlation of subsolidus phase relations in the Ag–Pd–O system to oxidation reduction kinetics and dilatometric behavior. (8) 2232
Wang, Yucong; and Mikkola, Donald E.
{0001}⟨10$\bar{1}$0⟩ slip and basal twinning in sapphire single crystals shock-loaded at room temperature. (12) 3252
Wang, Zhanyi; Li, Yan Z.; Harmer, Martin P.; and Chou, Ye T.
Thermal healing of laser-induced internal cracks in lithium fluoride crystals. (6) 1596
Warren, Bernard E.
X-ray determination of the structure of glass. (1) 5
Warren, Bernard E.; Krutter, H.; and Morningstar, O.
Fourier analysis of X-ray patterns of vitreous SiO_2 and B_2O_3. (1) 11
Warren, Paul D. See Mackin, Thomas J.
Warrier, Krishna Gopa Kumara; Varma, Hari Krishna; Mani, Themanam Veettil; and Damodaran, Alathoor Damodaran
Rapid method for the preparation of 123 superconductor using microwaves. (7) 1990
Wechsler, Barry A.; and Kirby, Kevin W.
Phase equilibria in the system barium titanate–strontium titanate. (4) 981
Wehbi, Dahloul See Baran, George R.
Wei, George C. See Sung, Changmo
Weihs, Timothy P. See Ashcroft, Ian A.
Weimer, Alan W.; Moore, William G.; Roach, Raymond P.; Hitt, James E.; and Dixit, Ravindra S.
Kinetics of carbothermal reduction synthesis of boron carbide. (9) 2509
Weinberg, Michael C.
Time-temperature-transformation diagrams with more than one nose. (1) 56
Weirauch, Douglas A., Jr.; and Graddy, G. E., Jr.
Calculated phase relations in the Al–Li–O system at 1000 K with implictions for refractories and metal–matrix composites. (6) 1484
Westmoreland, C. Gary See Bleier, Alan
Weston, Norman E. See Wallenberger, Frederick T.
White, Grady S. See Wong-Ng, Winnie
White, Kenneth W.; and Kelkar, Girish P.
Fracture mechanisms of a coarse-grained, transparent $MgAl_2O_4$ at elevated temperatures. (12) 3440
White, Timothy J. See Mitamura, Hisayoshi
Wicks, George G. See Lodding, Alexander R.
Wiederhorn, Sheldon M.
Editorial comments on a paper by Frank W. Preston. (10) 2643; See also Hockey, Bernard J.
Wiedlocher, David E.; Tucker, Dennis S.; Nichols, Ron; and Kinser, Donald L.
Low-earth-orbit effects on strength of glasses. (10) 2893
Wilkinson, David S. See Arita, Irene H.; Chadwick, Magaret M.
Will, Fritz G.; deLorenzi, Horst G.; and Janora, Kevin H.
Conduction mechanism of single-crystal alumina. (2) 295; Effect of crystal orientation on conductivity and electron mobility in single-crystal alumina. (10) 2790
Will, Fritz G.; and Janora, Kevin H.
Minimization of parasitic currents in high-temperature conductivity measurements on high-resistivity insulators. (10) 2795
Williams, Wendell S. See Huang, Jung-Sheng
Winchester, Steven C. See Saltzberg, Michael A.
Wirtz, Gerald P. See Chen, Zhong-jia; Marques, Fernando M. B.
Wirtz, Gerald P.; and Marques, Fernando M. B.
Oxygen fugacity control in nonflowing atmospheres: II, Theoretical model. (2) 375
Woermann, Eduard See Kaiser, Arno
Wohlfromm, Hans; Pena, Pilar; Moya, José S.; and Requena, Joaquín
Al_2TiO_5 formation in alumina/titania multilayer composites. (12) 3473
Wolfenstien, Jeffrey See Ruano, Oscar A.
Won, Dong-Yeon See Kim, Chan Joong
Wong, Curtis A. See Catalan, Antonio B.
Wong-Ng, Winnie Kwai See Hill, Michael D.
Wong-Ng, Winnie; White, Grady S.; and Freiman, Stephen W.
Application of molecular orbital calculations to fracture mechanics: Effect of applied strain on charge distribution in silica. (11) 3097
Wood, David See Hill, Robert G.
Wood, Timothy G. See Seyferth, Dietmar
Wright, Barbara M. See Ewing, Kenneth J.

Wu, Hwai-Chung; and Li, Victor C.
Snubbing and bundling effects on multiple crack spacing of discontinuous random fiber-reinforced brittle matrix composites. (12) 3487
Wu, Kaiwen; and Schulze, Walter A.
Effect of the ac field level on the aging of the dielectric response in polycrystalline $BaTiO_3$. (12) 3385; Aging of the weak-field dielectric response in fine- and coarse-grain ceramic $BaTiO_3$. (12) 3390
Wu, Xin; and Chen, I-Wei
Exaggerated texture and grain growth in a superplastic SiAlON. (10) 2733; Hot extrusion of ceramics. (7) 1846
Xia, Fei See Zhang, Jinsong
Xu, Antai; and Solomon, Alvin A.
Diffusional creep and cavitational strains in high-purity alumina under tension and subsequent hydrostatic compression. (4) 985
Xu, Qi Chang See Chen, Jayu; Sugawara, Yutaka
Xu, Youren See Lin, Chih-Kuang Jack; Ruh, Robert
Xu, Youren; Zangvil, Avigdor; Landon, Martine; and Thevenot, François
Microstructure and mechanical properties of hot-pressed silicon carbide–aluminum nitride compositions. (2) 325
Xue, Liang A.; and Chen, I-Wei
Fabrication of mullite body using superplastic transient phase. (5) 1085
Xue, Liang A.; Meyer, Karsten; and Chen, I-Wei
Control of grain-boundary pinning in Al_2O_3/ZrO_2 composites with Ce^{3+}/Ce^{4+} doping. (4) 822
Yamada, Osamu See Zeng, Jianren
Yamagiwa, Katsuya See Hirano, Shin-ichi
Yamaguchi, Takashi See Yata, Kunio
Yamaguchi, Yoshimi See Kitaoka, Satoshi
Yamai, Iwao; and Ota, Toshitaka
Thermal expansion of homogeneous and gradient solid solutions in the system $KZr_2(PO_4)_3$–$KTi_2(PO_4)_3$. (8) 2276
Yamamura, Hiroshi See Mori, Toshiyuki; Taimatsu, Hitoshi
Yamamuro, Takao See Li, Panjian
Yamauchi, Hisao See Wada, Takahiro
Yamauchi, Yukihiko See Ohji, Tatsuki
Yami, Iwao See Ota, Toshitaka
Yanagida, Hiroaki See Ohara, Yoshinobu; Pai, Chul-Hoon
Yang, Fuqian See Burns, S. J.
Yang, Jenn-Ming See Lin, Wai
Yang, Jingyu See Mackin, Thomas J.
Yang, Sheng-Jenn See Wang, Chuei-Tang
Yang, Xiao Feng; and Knowles, Kevin M.
The one-dimensional car parking problem and its application to the distribution of spacings between matrix cracks in unidirectional fiber-reinforced brittle materials. (1) 141
Yang, Xi See Ownby, P. Darell
Yano, Toyohiko See Suematsu, Hisayuki
Yano, Toyohiko; Kato, Satoshi; and Iseki, Takayoshi
High-resolution electron microscopy of the silicon carbide/aluminum carbide interface. (3) 580
Yao, Xi See Cheng, Humin; Chu, Fan; Sun, Hongtao
Yarbrough, Walter A.
Vapor-phase-deposited diamond—Problems and potential. (12) 3179
Yaroshenko, Viktor P. See Gogotsi, Yury G.
Yashima, Masatomo; Ishizawa, Nobuo; and Yoshimura, Masahiro
Application of an ion-packing model based on defect clusters to zirconia solid solutions: I, Modeling and local structure of solid solutions. (6) 1541; Application of an ion-packing model based on defect clusters to zirconia solid solutions: II, Applicability of Vegard's law. (6) 1550
Yata, Kunio; and Yamaguchi, Takashi
Effect of additives on Ostwald ripening of silver in glass. (10) 2910; Effect of temperature on Ostwald ripening of silver in glass. (8) 2071
Yau, Jen-Kuan See Howard, Scott A.
Yen, Tung-sheng See Yuan, Li-jian
Yoden, Hiroyoshi See Hashimoto, Noboru
Yogo, Toshinobu See Hirano, Shin-ichi; Kamiya, Kanichi
Yoo, Han-Ill; and Choi, Hyun-Suk
Hall effect and charge carrier generation in $YBa_2Cu_3O_x$. (10) 2707
Yoon, Duk N. See Park, Sang-Yeup
Yoon, Duk-Yong See Jeong, Jun-Whan
Yoshida, Hideto See Maki, Iwao
Yoshida, Masahiro See Kasuga, Toshihiro
Yoshida, Takashi See Kodama, Tatsuya
Yoshikawa, Shoko See Sugarwara, Yutaka
Yoshikawa, Yoshio; and Tsuzuki, Kaoru
Fabrication of transparent lead lanthanum zirconate titanate ceramics from fine powders by two-stage sintering. (9) 2520
Yoshimura, Masahiro See Yashima, Masatomo
Yoshino, Yuichi; Ohtsu, Hidehiko; and Shibata, Takashi
Thermally induced failure of copper-bonded alumina substrates for electronic packaging. (12) 3353
Yoshino, Yuichi; and Shibata, Takashi
Structure and bond strength of a copper–alumina interface. (10) 2756
Yoshioka, Toshiaki See Sato, Tsugio
Young, Jack P. See Dai, Sheng
Young, J. Francis See Chan, Chin Jong
Yu, Ai-Bing; Zou, Rui-Ping; and Standish, Nicholas
Packing of ternary mixtures of nonspherical particles. (10) 2765
Yu, Cheng-Sheng; Shetty, Dinesh K.; Shaw, Michael C.; and Marshall, David B.
Transformation zone shape effects on crack shielding in ceria-partially-stabilized zirconia (Ce-TZP)–alumina composites. (11) 2991
Yu, Chunzhe; and Klein, Lisa C.
Supported alumina membranes by an in-situ sol–gel method. (9) 2613
Yuan, Li-jian; and Yen, Tung-sheng
Major influences on the particle-size–transformation-temperature relation in Al_2O_3–ZrO_2 composites. (9) 2576
Yue, Cheng-Feng See Pan, Wuyi
Yuli, Chen See Gongyi, Guo
Yurimoto, Hisayoshi See Sakaguchi, Isao
Zaghete, Maria A.; Paiva Santos, Carlos O.; Varela, José A.; Longo, Elson; and Mascarenhas, Yvonne P.
Phase characterization of lead zirconate titanate obtained from organic solutions of citrates. (8) 2088
Zangvil, Avigdor See Lin, Chih-Kuang Jack; Ruh, Robert; Xu, Youren
Zangvil, Avigdor; Lin, Chien-Cheng; and Ruh, Robert
Microstructural studies in alkoxide-derived mullite/zirconia/silicon carbide-whisker composites. (5) 1254
Zdaniewski, Wieslaw A.; and Brungard, Nancy L.
X-ray photoelectron spectroscopy studies of metallic diborides. (10) 2849
Zeng, Jianren; Tanaka, Isao; Miyamoto, Yoshinari; Yamada, Osamu; and Niihara, Koichi
Densification and microstructural development of silicon nitride–silica during hot isostatic pressing. (1) 148; High-temperature strength and cavitation threshold of silicon nitride–silica ceramics. (1) 195
Zhang, Jinsong; Huang, Hua; Cao, Lihua; Xia, Fei; and Li, Guangqiang
Semiconductive property and impedance spectra of alumina–silicon carbide whisker composite. (8) 2286
Zhang, Liang-Ying See Chu, Fan
Zhang, Liangying See Sun, Hongtao
Zhang, Lijie See Bateman, Charles A.
Zhang, Litong See Zhou, Wancheng
Zhang, Tao See Kostić, Branko
Zhang, Tao; and Evans, Julian R. G.
Calculation of temperature distributions during the solidification stage in ceramic injection molding. (8) 2260
Zhao, Junhong; and Harmer, Martin P.
Effect of pore distribution on microstructure development: III, Model experiments. (4) 830
Zhao, Zhenguo See Cheng, Humin
Zheng, Jingmin; Carlson, William B; and Reed, James S.
Flow mechanics on extrusion through a square-entry die. (11) 3011
Zheng, Jingmin; and Reed, James S.
Study of the bimodal pore structure of ceramic powder compacts by mercury porosimetry. (12) 3498
Zhongjun, Liang See Shaoqiu, Tang
Zhou, Wancheng; Zhang, Litong; and Fu, Hengzhi
Glassy phase in alumina–silica ceramic shell molds. (1) 77
Zhou, Yiyang See Burns, S. J.
Zhu, Hai-Yan; Hirata, Toshiya; and Muramatsu, Yuji
Phase separation in 12 mol% ceria-doped zirconia induced by heat treatment in H_2 and Ar. (10) 2843
Zirl, David M.; and Garofalini, Stephen H.
Structure of sodium aluminosilicate glass surfaces. (9) 2353
Zoitos, Bruce K. See Lodding, Alexander R.
Zok, Frank W. See Beyerle, Douglas S.; Folsom, Craig A.; Mackin, Thomas J.
Zou, Rui-Ping See Yu, Ai-Bing
Zukoski, Charles F. See Look, Jee Loon

SUBJECT INDEX TO THE JOURNAL OF THE AMERICAN CERAMIC SOCIETY INCLUDING ADVANCED CERAMIC MATERIALS AND COMMUNICATIONS

Numbers in parentheses refer to *monthly* issue of the *Journal*; numbers following are *page* numbers.

Abrasives,
grinding temperatures (10) 2742
Activation,
of slag, by alkali-metal and alkaline-earth hydroxides (12) 3233
Additives,
Cr_2O_3, effect on slag resistance of Al_2O_3-SiO_2 refractories (10) 2857
MgO, grain boundary migration induced in cubic ZrO_2–Y_2O_3 by (10) 2659
effect on Ostwald ripening of Ag, in glass (10) 2910
soil, effect on vitrification of nuclear wastes (1) 112
Aggregates,
Al_2O_3, fractal dimension of (7) 1981
Aging,
of $BaTiO_3$, effect of ac field (12) 3385
of dielectric response, in $BaTiO_3$ (12) 3390
Alite,
impurity concentration in, effect of MgO and SO_3 (11) 3163
Alloys,
Ni-Ti shape memory, PZT films on (10) 2891
Pt-Cr and Pt-V, activity-composition relations in (6) 1361
Aluminum,
Nb_2Al, toughening by combustion synthesis (6) 1678
Aluminum oxide,
Cu-bonded substrates, thermally induced failure of (12) 3353
-ZrO_2 composites, particle size-transformtion temperature relations in (9) 2576
α-, tribological characteristics in high-temperature water (11) 3075
aggregates, fractal dimension of (7) 1981
β″- solid electrolyte, analysis of crystalline phases (1) 52
χ-, thermal transformation of (9) 2597
conductivity and electron mobility, effect of crystal orientation (10) 2790
containing 1 vol% anorthite, improved flaw tolerance in (7) 1870
corrosion, by K vapor (1) 109
crack growth in (4) 958
crack-bridging, analysis for (4) 848
creep of, grain boundary sliding measurements during (6) 1612
electrolytic cells, refractory lining for (8) 2308
fatigue, static and cyclic, at high temperatures (3) 637
fatigue behavior, effect of crack-bridging ligaments (11) 2976
fibers, melt spinning of (3) 629
fracture of, dynamic (10) 2867
with glass phase, measurement of creep in (6) 1691
membranes, sol-gel preparation of (9) 2613
-metal composites, formation of (2) 447; (2) 455
porous, rheology of (8) 2165
powder, laser ablation synthesis of (12) 3293
single-crystal, conduction mechanism of (2) 295
sintered, frequency of pore location in (9) 2599
slip, reformulation of (2) 290
stress-strain behavior, for different Mg-PSZ grades (11) 3058
suspensions, flocculated, consolidation behavior (12) 3305
translucent, by HIP (2) 469
segregation of Mg to pores (7) 1796
tubes, fracture under tension/torsion (4) 896
Analysis,
EXAFS, of environment around Cu in Cu aluminosilicate glasses (2) 477
Raman, of glasses $Ba_2TiSi_2O_8$ and $Ba_2TiGe_2O_8$ (9) 2630
Rietveld, of phase transition in $La(Cr_{1-x}Mn_x)O_3$ (6) 1685
X-ray, of structure of glass (1) 5
X-ray scattering, of SiO_2-polymer gel (4) 971
XRD, of enamel-steel interface (11) 3087
XRD data, for diamond polytypes (7) 1876
crack-bridging, for Al_2O_3 (4) 848
evolved-gas, of $YBa_2Cu_3O_7$ and $LaBa_2Cu_3O_7$ (6) 1705
phase, of PZT (8) 2088
phase and property, of B_4C-BN composites (4) 864
radiotracer, of lanthanum fluoride preparation (6) 1562
of residual stress, in 6H-SiC particles in Al_2O_3/SiC composites (7) 1854
spectroscopic, of alkali tellurite glasses (2) 277
temperature profile, of combustion synthesis (1) 175; (1) 180
thermal, of SiO_2-Al_2O_3-CaO-CaF_2 glass (4) 778
thermodynamic, of system MgO-Al_2O_3 (6) 1497
thermogravimetric, of system M-Co-O (M=Ta and Nb) (6) 1447
of volatility of nuclear waste glass (3) 507
thermomechanical, of fibers (1) 136
thermomechanical and DTA, of kaolinite (7) 2013
Anatase,
modification, of TiO_2, CO and H detection by (11) 2964
-rutile transformation, effect of Cl atmosphere (11) 2934
Anisotropy,
in Si_3N_4 (7) 1748
thermal expansion, of Ce-TZP (10) 2828
Apatite,
fluor-, formation in aqueous solution (12) 3401
formation induced by SiO_2 gel, in simulated body fluid (8) 2094
Atmosphere,
nonflowing, oxygen fugacity control in (2) 369; (2) 375
Barium titanate,
PTC-type, evaluation of acceptor-states compensation (3) 722
PTCR, incorporation of grain-boundary layer modifiers in (1) 203
Sb_2O_3-doped, PTCR, determination of inversion temperature (3) 587
dielectric relaxation of, temperature dependence (11) 2939
dielectric response, aging of (12) 3390
effect of ac level (12) 3385
donor-doped, morphology and grain growth in (9) 2383
doped, ultraslow dielectric relaxation of (9) 2379
editorial comments, on two papers by Wilhelm R. Buessem, L. Eric Cross, and Amiya K. Goswami (11) 2930
films, pulsed-laser deposition of (7) 1999
high permittivity, theory of (11) 2923
permittivity, effect of pressure on (11) 2926
reduced, effect of reoxidation on acceptor-state density (3) 728
resonance mode, effect of crystal-axis orientation (6) 1674
suspension, stabilization with polyacrylic acid (12) 3201
Belite,
crystals, remelting reactions during cooling (10) 2896
Beryllium,
BeO, crystals, creep of (1) 71
Bioceramics,
composites, ZrO_2-toughened glass-ceramic, by sinter-HIPing (5) 1103
glass-ceramics, ZrO_2-toughened (7) 1884
Boehmite,
particles, synthesis of (9) 2615
Bonding,
anodic, rate processes during (10) 2644
of metals with oxides (11) 3118
Borates,
Al, preparation and characterization of (9) 2605
whiskers, sintering (12) 3452
Borides,
metallic di-, XPS study (10) 2849
Brittle materials,
controlled crack growth specimens for (1) 206
fiber-reinforced, spacings between matrix cracks, application of car parking problem (1) 141
Bubbles,
He, in SiC, deformation by stress-induced transport of (1) 237
Calcium,
diffusion, in MgO (3) 712
Calorimetry,
differential scanning, estimation of nucleation rate by (9) 2449
Capacitors,
CuO-$BaTiO_3$, as CO_2 gas sensor (3) 613
barrier layer, using barium bismuth plumbate and barium plumbate (11) 2953
interaction of Ag/Pd metallization, with bismuth oxide-based fluxes (9) 2339
Carbides,
Al Si, effect of oxygen on formation of (1) 224
B_4C, carbothermal reduction synthesis of (9) 2509
lattice constants of (8) 2207
HfC, oxidation kinetics (10) 2671
WC, coatings, CVD of (4) 1008
Casting,
tape, aging shrinkage in green sheets (9) 2373
Cells,
SOFC, microwave sintering of (2) 341
electrolytic, Al_2O_3, refractory lining for (8) 2308
oxygen concentration, use of cuprates in (6) 1434
Cements,
calcium phosphate, prepared by acid-base reaction (8) 2076
deterioration, effect of magnesium silicate hydrate composition and appearance (10) 2904
β-dicalcium silicate, highly reactive (2) 353; (2) 359
germanium oxide carnotite, hydration of (4) 1035
hydration, formation of protective layer during (6) 1669
pastes, class F fly ash blended, zeolite formation in (6) 1574
portland, effect of SiO_2 fume hydration (4) 939
portland clinker, effect of MgO and SO_3 on impurity concentration in alite (11) 3163
Ceramic materials,
made by exothermic reactions, properties of (1) 36
thermal shock damage assessment, using ultrasonics (7) 1839
Ceramic-metal systems,
SiC-Al_4C_3 interface, HREM study (3) 580
Ceramics,
extrusion of, hot (7) 1846
injection-molded, measurement of residual stress in (10) 2773
Charge,
carrier generation, in $Y_1Ba_2Cu_3O_x$ (10) 2707
distribution, in SiO_2, effect of applied strain (11) 3097
Chemical properties,
of composites, C fiber/oxide matrix (7) 1889
Chlorides,
NaCl, crystals, effect of temperature on formation of creep substructure (2) 347
Chlorine,
atmosphere, effect on anatase-rutile transformation (11) 2934
Chromium,
metal chromite powders, combustion synthesis of (4) 1012
oxidation state, in CaO-Al_2O_3-CrO_x-SiO_2 melts (6) 1378
oxidation states, in system CaO#CaO-Cr_2O_3 (8) 2184
Coatings,
SiC, composition and mechanical properties (9) 2623
WC, for wear/erosion resistance, CVD of (4) 1008
diamond, amorphic (10) 1535
inclusion, for composite processing (3) 514
oxide debond, for metal-toughened intermetallics (7) 1935
thermal barrier, In_2O_3-stabilized ZrO_2 (7) 1818
Combustion,
synthesis, temperature profile analysis (1) 175; (1) 180
Compaction,
cyclic, of powders (11) 3157
Compacts,
diamond, of fine particles, microstructure of (1) 253
polycarbosilane-impregnated SiC hollow particles, reaction sintering and thermoelectric properties—correction (2) 479
powder, pore structure of (12) 3498
Composites,
Al_2O_3 and Si_3N_4 matrix/SiC whisker, elastic properties (4) 908
Al_2O_3–metal, synthesis of (10) 2749
Al_2O_3-AlN-TiN, mechanical properties and oxidation behavior (8) 2251
Al_2O_3-SiC, from aluminosilicate precursors (8) 2283
Al_2O_3-SiC whisker, semiconductive property and impedance spectra (8) 2286
Al_2O_3-TiN and Al_2O_3-TiC, oxidation resistance of (6) 1688
Al_2O_3-Y_2O_3-Si_3N_4/SiC, superplastic, tensile ductility of (9) 2363
Al_2O_3-ZrO_2, particle size-transformation temperature relations in (9) 2576
Al_2O_3-$ZrO_2(CeO_2)$, effect of processing on microstructure and transformation (10) 2649
Al_2O_3-ZrO_2-SiC whisker, fabrication of (12) 3369
Al_2O_3-metal, formation of (2) 447; (2) 455
Al_2O_3/SiC, analysis of residual stress in 6H-SiC particles (7) 1854
Al_2O_3/TiO_2, Al_2TiO_5 formation in (12) 3473
Al_2O_3/aluminate platelet, in situ (9) 2610
B_4C-BN, phase and property studies (4) 864
thermal conductivity of (10) 2887
C fiber/oxide matrix, chemical properties in (7) 1889
Ce-TZP-Al_2O_3, transformation zone shape effect on crack shielding (11) 2991
Ce-TZP/Al_2O_3, shape memory-like effect in (7) 2003
PZT fiber/polymer, piezoelectric (6) 1648
β-Si_3N_4 whisker-reinforced Si_3N_4, extruded, microstructure of (10) 2713
Si_3N_4–BN, fracture toughness and thermal shock behavior (1) 67
Si_3N_4–SiO_2, densification and microstructural development during HIP (1) 195
high-temperature strength and cavitation threshold of (1) 148
Si_3N_4-ZrO_2(+Y_2O_3), microstructure and oxidation of (1) 28
β-SiAlON–glass adhesives, joining SiAlON using (9) 2491

SiC fiber-reinforced RBSN matrix, role of interfacial C layer in thermal diffusivity-conductivity (2) 334
SiC fiber-reinforced RBSN matrix, oxidation effects on mechanical properties (2) 406
SiC monofilament and SiC–borosilicate, thermal expansion of (10) 2871
SiC platelet/Al_2O_3, fabrication of (12) 3346
SiC whisker-reinforced, model for whisker orientation (6) 1522
SiC whisker-reinforced Al_2O_3, equations for creep of (12) 3481
SiC_w/Al_2O_3, dynamic fracture of (10) 2867
SiC-SiC, joining (1) 131
SiC-TiB_2, sintering (9) 2479
SiC-fiber-reinforced ZrO_2 titanate matrix, fabrication of (6) 1628
SiC-reinforced glass, measurement of residual stress in (8) 2225
SiC whisker-reinforced Al_2O_3, cyclic fatigue-crack growth in (4) 759
SiC-whisker-reinforced lithium aluminosilicate matrix, by colloidal processing (10) 2883
TiN-reinforced Si_3N_4/Si oxynitride, microstructural development of (11) 2945
YSZ/Al_2O_3, by electrophoretic deposition (10) 2907
ZrB_2 platelet-reinforced ZrC_x, microstructure of (8) 2139
ZrO_2-reinforced $MoSi_2$, *R*-curve behavior (1) 23
ZrO_2-toughened bioactive glass-ceramic, by sinter-HIPing (5) 1103
ceramic particulate, sintering (8) 2056; (8) 2066
ceramic-matrix, damage and failure in (10) 2719
coated C-C, oxidation inhibiting mechanisms (3) 703
containing faceted inclusions, stress distributions in (7) 1807
continuous-fiber-reinforced C matrix, mechanical properties (11) 3017
duplex and laminar, microstructural engineering with (7) 1715
fiber-matrix interfacial debonding, models of (6) 1694
fiber-reinforced, frictional heating in (4) 929
fiber-reinforced brittle matrix, snubbing and bundling effects on crack spacing (12) 3487
glass-matrix, crack growth in (8) 2219
sintering, creep, and electrical conductivity of (8) 2146
graphite-cristobalite, PTC effect in (7) 1772
inclined fibers/whiskers in, crack bridging by (11) 3111
interpenetrating phase (4) 739
laminar ceramic/fiber-reinforced epoxy, mechanical properties (11) 2969
laminated, design for strength and toughness (12) 3396
laminated 0/90 ceramic/matrix, damage mechanisms and mechanical properties of (12) 3321
matrix cracks, distribution of (2) 316
metal-toughened intermetallics, oxide debond coatings for (7) 1935
mullite-Al_2O_3, by extrusion (4) 953
mullite-Al_2O_3 particulate, by infiltration processing (1) 44
particulate-SiC-reinforced Al matrix, effect of particle size on thermal conductivity (11) 3137
piezoelectric ceramic-air, effects of heat treatments (3) 647
processing, heterocoagulation as inclusion coating for (3) 514
stress-strain behavior (7) 1729
whisker-reinforced, effect of temp. on strength and modulus of (4) 786

Concretes,
aerated, phase evolution during autoclaving (7) 1858

Conductivity, electrical,
in Al_2O_3, single-crystal (2) 295
of composites, glass-matrix (8) 2146
of systems, $La_{1-x}Na_xCo_{1-x}Nb_xO_3$ (11) 3141

Conductivity, thermal,
of composites, B_4C-BN (10) 2887
particulate-SiC-reinforced Al matrix, effect of particle size (11) 3137
of porous materials, gas pressure and temperature dependence (12) 3425

Cooling,
crystals, belite, remelting reactions during (10) 2896

Copper,
$La_{1-x}Ba_xCuO_3$, synthesis of, defect-chemical aspects (7) 1993
cuprates, phase relations and use as oxygen concentration cells (6) 1434
in glasses, copper aluminosilicate, environment around (2) 477

Cordierite,
dielectric properties, effect of H_2O and CO_2 (9) 2395
powders, alkoxide-derived, effects of precursors on (1) 153
synthesis and sintering, grinding effects on (9) 2535

Corrosion,
of Al_2O_3, by K vapor (1) 109
of Ce-TZP and Si_3N_4, effect on static-fatigue life (3) 719
of SiC, in N_2-H_2-CO gases (12) 3257; (12) 3268
-resistant layers, Y_2O_3 (4) 1005

Cracking,
R-curve behavior, of ZrO_2-reinforced $MoSi_2$ (1) 23
R-curve behavior, of reinforced Si_3N_4 (7) 1777
effect of indentation interaction (10) 2809
stress corrosion, of glass, Charles-Hillig theory for (3) 540
toughness-curves, using indentation flaws (11) 3049

Cracks,
bridging, by inclined fibers/whiskers in ceramic composites (11) 3111
-bridging ligaments, effect on fatigue behavior of Al_2O_3 (11) 2976
closure stresses, for Si_3N_4 with 8 wt% Sc_2O_3 (6) 1508
cone, nucleation at sharp contacts (10) 2877
controlled growth specimen, for brittle systems (1) 206
controlled shape, for indentation fracture of Na_2O-CaO glass (9) 2593
creep, growth threshold in glass-ceramic, origin of (3) 603
cyclic fatigue, growth in SiC whisker-reinforced Al_2O_3 composites (4) 759
growth, in Al_2O_3 (4) 958
in SiC whisker-reinforced mullite and Si_3N_4 (7) 1760
laser-induced internal, in LiF crystals, thermal healing of (6) 1596
matrix, distribution of (2) 316
spacing in fiber-reinforced brittle materials (1) 141
-shape effects, for indentation fracture toughness measurements (2) 305
shielding, in Ce-TZP-Al_2O_3 composites, effect of transformation zone shape (11) 2991
slow growth resistance, evaluation of (4) 772
spacing, in fiber-reinforced brittle matrix composites (12) 3487
subcritical, fracture toughness after extension of (11) 3133
growth in glass-matrix composites (8) 2219

Creep,
in Al_2O_3, with glass phase, measurement of (6) 1691
grain boundary sliding measurements during (6) 1612
of 6H α-SiC (12) 3421
Harper-Dorn and power-law, in MgO (7) 1737
of α-SiC, grain boundary sliding and dislocation glide in (7) 1786
siliconized, effect of microstructure (7) 1822
behavior, of rare-earth disilicate-Si_3N_4 (8) 2050
of composites, SiC whisker-reinforced Al_2O_3 (12) 3481
glass-matrix (8) 2146
-crack growth threshold, in glass-ceramic, origin of (3) 603
of crystals, BeO (1) 71
-fatigue behavior, of Si_3N_4 (9) 2453
due to grain boundary phase (9) 2327
mechanism, of YAG (7) 1756
substructure, in NaCl, effect of temperature on formation of (2) 347
tensile, testing (8) 2304

Cristobalite,
chemically stabilized, synthesis of (1) 89

Crystallization,
of Si_3N_4, densified with $RE_2Si_2O_7$ (8) 2037
behavior, of CaO-P_2O_5 glass with TiO_2, SiO_2, and Al_2O_3 addition—correction (10) 2918
of CaO-P_2O_5 glasses with TiO_2, SiO_2, and Al_2O_3 additions (6) 1641
in glass-ceramics, Ba-containing magnesium aluminosilicate (6) 1512
Sb-containing slag (2) 440
of glasses, Y_2O_3-Al_2O_3-SiO_2 (12) 3315
anorthite-seeded albite (10) 2665
of mullite, effect of density (12) 3457
of particles, metal oxide (4) 1029
tendency, in system Na_2O-B_2O_3-Al_2O_3 (11) 3129

Crystals,
BeO, creep of (1) 71
6H α-SiC, creep of (12) 3421
InSe, thermal processing in S vapor (4) 854
$Li_{1+x}Ti_{2-x}Al_x(PO_4)_3$, fast-Li-conducting, porous glass-ceramic with skeleton of (10) 2862
LiF, thermal healing of laser-induced cracks in (6) 1596
NaCl, effect of temperature on formation of creep substructure (2) 347
SiC, polishing with chromium(III) oxide (1) 189
ZrO_2-Gd_2O_3, electrical properties (8) 2297
belite, reactions during cooling (10) 2896
cordierite, effect of H_2O and CO_2 on dielectric properties (9) 2395
floating zone growth, and phase equilibria (6) 1440
sapphire, shock-loaded, slip and basal twinning in (12) 3252
whiskers, aluminum borate, sintering and properties (12) 3452

Currents,
parasitic, minimization in conductivity measurements on insulators (10) 2795

Decomposition,
of perovskites, PZN (1) 82
spinodal, in system TiO_2-SnO_2, computer simulation of (7) 1906

Defects,
basal plane, in ZnO-Sb_2O_3, chemistry of (11) 3127
cracklike flaws, in Mg- and Ca-ion-implanted sapphire, healing of (9) 2547
improved flaw tolerance, in Al_2O_3 containing 1 vol% anorthite (7) 1870
inclusions, effect on densification (3) 519; (3) 525; (12) 3241

Deformation,
of Sc_2O_3-doped Si_3N_4 (12) 3331
twinning, of monoclinic ZrO_2 (8) 2302

Densification,
of Y_2O_3 (3) 709
of aluminum titanate, by seeding (6) 1529
of composites, Si_3N_4-SiO_2, during HIP (1) 195
effect of inclusions on (3) 519; (3) 525; (12) 3241
by forging, of reaction-synthesized TiC (3) 592
of pores, large (9) 2498
of silicon oxyanitride, by HIP (1) 62

Density,
grain-boundary acceptor-state, of reduced $BaTiO_3$, effect of reoxidation (3) 728
green, effect on crystallization of mullite (12) 3457
of liquids, Ga_2O_3 (6) 1656
packing, of nonspherical particles (10) 2765

Deposition,
CVD, of Si_3N_4 and Si (3) 619
of α-Si_3N_4 from SiF_4 and NH_3 (8) 2200; (10) 2803; of WC coatings (4) 1008
of SiC, from methyltrichlorosilane, depletion effects of (10) 2899
electrophoretic, of YSZ/Al_2O_3 laminar composites (10) 2907
filament-assisted CVD, of diamond (8) 2107
plasma-enhanced CVD, of BN (7) 1985
of BN—correction (10) 2919
pulsed-laser, of $BaTiO_3$ films (7) 1999
vapor-phase, of diamonds (12) 3179

Diagrams,
phase, of C-B-N solid solutions (1) 161
CaO-ZrO_2—correction (6) 1712
system CaO-ZrO_2 (3) 731; (3) 733
time-temperature-transformation, with more than one nose (1) 56

Diamonds,
CVD of, filament-assisted (8) 2107
amorphic, production and use of (10) 1535
compact, microstructure of (1) 253
polytypes, calculated XRD data for (7) 1876
vapor-phase-deposited (12) 3179

Dielectric materials,
$Ba(Mg_{1/3}Ta_{2/3})O_3$, microwave characteristics (12) 3337
$Ba(Zn_{1/3}Ta_{2/3})O_3$-(Sr,Ba)$(Ga_{1/2}Ta_{1/2})O_3$, crystal structure and microwave properties (7) 1767

Dielectric properties,
of AlN, effect of dopants (11) 3145
of cordierite, effect of H_2O and CO_2 (9) 2395
of films, potassium tantalum niobate, effect of sintering (11) 3007
loss at microwave frequencies, of $Ba(Zn_{1/3}Ta_{2/3})O_3$ (9) 2573
response, of $BaTiO_3$, aging of (12) 3390
of $BaTiO_3$, effect of ac field on aging (12) 3385

Dies,
square-entry, flow mechanics on extrusion through (11) 3011

Diffusion,
of Ca, in MgO (3) 712
of Sr and Si, in MgO (12) 3477

Dinnerware,
porcelain, effect of firing temperature on bending strength (7) 1801

Diopside,
Ni, stability in $CaMgSi_2O_6$-$CaNiSi_2O_6$ solid solutions (6) 1458

Dislocations,
in AlN, TEM of (4) 873

Dopants,
effect on impedance and dielectric properties, of AlN (11) 3145
effect on nucleation of quartz, in lithium aluminosilicate glass (7) 1958
metal, in Bi-Pb-Ca-Sr-Cu-O films (1) 231
relationship to ordering, in systems $A(B^{2+}B^{5+})O_3$ and $A(B^{3+}B^{6+})O_3$ (10) 2881
in vapor-phase synthesis, of TiO_2 powders (12) 3408

Ductility,
tensile, of superplastic Al_2O_3-Y_2O_3-Si_3N_4/SiC composites (9) 2363

Elasticity,
Young's modulus, of films, determination of (10) 2915
of composites, Al_2O_3 and Si_3N_4 matrix with SiC whiskers (4) 908
effect on fatigue and lifetime estimations, of optical fibers (10) 2692
of glasses, rare-earth aluminosilicate (3) 503
shape memory-like effect, in Ce-TZP/Al_2O_3 composites (7) 2003

Electrical properties,
of Ba-doped $(Bi,Pb)_2Sr_2Ca_2Cu_3O_x$ (7) 1864
of ZnO, with Cu additive (12) 3363
of crystals, ZrO_2-Gd_2O_3 (8) 2297
electrostrictive, of PZN-BT-PT (8) 2155
resistance, grain-boundary and bulk, in $Co_xFe_{3-x}O_4$ (6) 1708
thermo-, of polycarbosilane-impregnated compact of SiC hollow particles—correction (2) 479
of varistors, ZnO-glass (6) 1636

Electrolytes,
solid, β″-Al_2O_3-based, analysis of crystalline phases in (1) 52
use to control size and agglomeration, in TiO_2 particles (6) 1587

Enamels,
-steel interface, XRD study (11) 3087

Energy,
fracture, of brittle bimaterial interfaces, indentation test for (2) 413
fracture and contact, of mica-mica, SiO_2-SiO_2, and mica-SiO_2 interfaces (3) 667
stress-dependent activation, for lightguide fibers (12) 3485

Engineering,
microstructural, with duplex and laminar composites (7) 1715

Enthalpy,
of formation, of zircon (6) 1430
Equations,
for creep, of SiC whisker-reinforced Al_2O_3 composites (12) 3481
Equilibrium,
activity-composition relations, in Pt-Cr and Pt-V alloys (6) 1361
liquid-solid, in system FeO-NiO-Fe_2O_3-SiO_2 (6) 1342
in system NiO-TiO_2-SiO_2 (6) 1382
relations, in system NiO-TiO_2 (6) 1357
spinel-silicate, in system MgO-FeO-Fe_2O_3-Al_2O_3-Cr_2O_3-SiO_2 (6) 1390
studies, of system (Fe,Co)-$(Fe,Co)_3O_4$ (6) 1452
Etching,
microwave, of stabilized ZrO_2 (12) 3462
Eutectics,
composition, in system $Y_4Al_2O_9$ and Y_2O_3 (7) 2006
Expansion,
thermal, of SiC monofilaments and SiC–borosilicate composites (10) 2871
of solid solutions in system KZP-KTP (8) 2276
Extrusion,
of composites, mullite-Al_2O_3 (4) 953
hot, of ceramics (7) 1846
of mixtures, α-Al_2O_3–boehmite (3) 575
through square-entry die, flow mechanics on (11) 3011
Fatigue,
behavior, of Al_2O_3, effect of crack-bridging ligaments (11) 2976
of ferroelectric polarization, in PLZT (6) 1534
static and cyclic, of Al_2O_3 at high temperature (3) 637
Ferrites,
La^{3+}-doped M-type Ca, structural instability and microstructural changes of (4) 915
Li-Zn, effect of Bi_2O_3 impurity on electrical resistivity (11) 3065
systems, $Co_xFe_{3-x}O_4$, electrical resistance in (6) 1708
Ferroelectric materials,
PZT, gels, powders, and films, sol-gel preparation of (11) 3091
anti-, lead zirconate-based, piezoelectricity in (4) 795
Ferroelectricity,
properties, of SBN:50 ceramics(9) 2581
Fiber optics,
activation energy for, stress-dependent (12) 3485
fatigue and lifetime estimations, effect of elasticity on (10) 2692
Fibers,
Al_2O_3, melt spinning of (3) 629
SiO_2, effect of NaCl solutions on strength and fatigue of (2) 364
bundle pushout (11) 3169
inclined, interaction of crack in glass matrix with (11) 3172
lightguide, stress-dependent activation energy for (12) 3485
production, temperature oscillations in ac heated filaments for (7) 1997
sapphire, in TiAl and glass matrices, effect of fiber roughness on sliding (12) 3358
thermomechanical evaluation of, simple test (1) 136
Filaments,
ac heated, for fiber production (7) 1997
Films,
Al-doped ZnO, by CVD (12) 3469
ß-BaB_2O_4, powders and films, sol-gel preparation of (9) 2590
$BaTiO_3$, pulsed-laser deposition of (7) 1999
Bi-Pb-Ca-Sr-Cu-O, metal dopants in (1) 231
PZT, on Ni-Ti shape memory alloys (10) 2891
oriented, synthesis of (10) 2785
$YBa_2Cu_3O_{7-x}$, solution-condensed (8) 2268
Young's modulus, determination of (10) 2915
heat-treated, surface morphology of (9) 2463
potassium tantalum niobate, effect of sintering on grain size and dielectric constant (11) 3007
systems, $AlPO_4$-TiO_2, preparation and physical properties (9) 2335
SiO_2-aluminum orthophosphate (12) 3417
Filtration,
particle migration during, analysis of (10) 2726
Firing,
Y_2O_3-doped ZrO_2, effect of entrapped gas (3) 716
Flow,
mechanics, on extrusion through square-entry die (11) 3011
Fluorides,
La, radiotracer study of preparation (6) 1562
Li, crystals, thermal healing of laser-induced cracks in (6) 1596
ZrF_4-H_2O, thermally decomposed, distribution of oxide in (7) 1918
Foamed ceramics,
open-cell, thermal shock behavior of (7) 1899
Formation,
of Si_3N_4, powders (3) 677
of composites, SiC platelet/Al_2O_3 (12) 3346
Forsterite,
precursors, poly(methacrylate) (7) 1831
Fracture,
behavior, of SiC whiskers (6) 1558
delayed, resistance of Si_3N_4 to (4) 1023
dynamic, of Al_2O_3 and SiC$_w$/Al_2O_3 (10) 2867
indentation, of Na_2O-CaO glass, controlled crack shapes for (9) 2593
mechanisms, of transparent $MgAl_2O_4$ (12) 3440
modes, in $MoSi_2$ (6) 1682
surfaces, fractal characteristics of (10) 2687
thermally induced, of Cu-bonded Al_2O_3 substrates (12) 3353
toughness, comparison of Berkovich and Vickers indenters (12) 3299
indentation measurements, crack-shape effects for (2) 305
after subcritical crack extension (11) 3133
of tubes, Al_2O_3, under tension/torsion (4) 896
Friction,
of Si_3N_4, in reactive environments (11) 3033
characteristics, of α-Al_2O_3 in high-temperature water (11) 3075
Fuels,
ZrC-coated particle, performance in irradiation and heating tests (11) 2985
Furnaces,
glassmelting, flow and heat-transfer, mathematical model—correction (4) 1038
Garnets,
YAG, creep mechanism of (7) 1756
liquid $Ln_3Al_5O_{12}$ (Ln=Dy, Y, and Lu), effect of melt temperature on solidification (11) 3166
Gases,
CO_2, sensor, CuO-$BaTiO_3$ capacitor as (3) 613
N_2-H_2-CO, corrosion of SiC in (12) 3257; (12) 3268
entrapped, effects on fast firing of Y_2O_3-doped ZrO_2 (3) 716
fission, release from uranium oxycarbide, effect of water vapor (3) 686
Gels,
C_{70}-doped solid SiO_2, by sol-gel processing (10) 2865
SiO_2, apatite formation induced by (8) 2094
SiO_2-polymer, X-ray scattering study (4) 971
aero- (8) 2027
editorial comments, on a paper by Rustum Roy (11) 2933
Germanates,
calcium hydrate, growth of calcium silicate on (9) 2619
Glass,
$Ba_2TiSi_2O_8$ and $Ba_2TiGe_2O_8$, Raman study of (9) 2630
CaMgSiAlO, matrix, shape of grains in (1) 216
CaO-P_2O_5, with TiO_2, SiO_2, and Al_2O_3 additions, crystallization behavior—correction (10) 2918
CaO-P_2O_5, with TiO_2, SiO_2, and Al_2O_3 additions, crystallization behavior (6) 1641
CdTe-doped SiO_2, sol-gel synthesis of (1) 220
Na_2O-CaO, controlled crack shapes for indentation fracture (9) 2593
Na_2O-CaO lead silicate, Pb-ion stability in (8) 2194
Na_2O-Y_2O_3-SiO_2, glass formation, properties and structure (12) 3278
Ostwald ripening of Ag in, effect of additives (10) 2910
effect of temperature (8) 2071
SiO_2, ir absorption coefficients (1) 209
SiO_2-Al_2O_3-CaO-CaF_2, thermal analysis (4) 778
Y_2O_3-Al_2O_3-SiO_2, crystallization of (12) 3315
alkali borate, secondary-phase separation in (4) 1026
alkali tellurite, structure and properties (2) 277
analysis, comments on papers by B. E. Warren (1) 16
anorthite-seeded albite, crystallization of (10) 2665
borosilicate, phase-separated, origin of viscosity increase (11) 3103
copper aluminosilicate, environment around Cu (2) 477
editorial comments on paper by Frank W. Preston (10) 2643
-forming ability, in system Na_2O-B_2O_3-Al_2O_3 (11) 3129
heavy-metal oxide (9) 2315
lanthanum fluoride, radiotracer study of preparation (6) 1562
lithium aluminosilicate, effect of dopants on nucleation of quartz in (7) 1958
matrix, interaction of crack with inclined fiber (11) 3172
melts, foaming produced by sodium sulfate decomposition (11) 2959
nuclear waste, depth profiling after burial in salt geology (10) 2702
durability (9) 2433
volatility of (3) 507
rare-earth aluminosilicate, elastic properties and molar volumes (3) 503
sodium aluminosilicate, effect of H_2O content on properties (4) 878
structure of surfaces (9) 2353
strength, effect of subsurface scribing (9) 2565
low-earth-orbit effects on (10) 2893
stress corrosion cracking, Charles-Hillig theory for (3) 540
structure, X-ray determination (1) 5
systems, time-temperature-transformation diagrams for (1) 56
viscoelastic model for, integration of hereditary integrals (8) 2213
waves in, failure (4) 1002
Glass-ceramics,
Ba-containing magnesium aluminosilicate, crystallization in (6) 1512
Sb-containing slag, crystallization of (2) 440
ZrO_2-toughened, bioactivity of (7) 1884
creep-crack growth threshold, origin of (3) 603
machinable, improvement of mechanical properties by heat treatment (8) 2300
porous, with fast-Li-conducting $Li_{1+x}Ti_{2-x}Al_x(PO_4)_3$ (10) 2862
Glass industry,
bottles, strength of (10) 2635
furnaces, flow and heat-transfer, mathematical model—correction (4) 1038
Grain boundaries,
layer modifiers, in PTCR $BaTiO_3$ (1) 203
migration, in ZrO_2–Y_2O_3, induced by MgO (10) 2659
phase, creep due to (9) 2327
Grain growth,
in SiAlON, exaggerated texture and (10) 2733
of ZnO, during Bi_2O_3 sintering (9) 2529
in donor-doped $BaTiO_3$ (9) 2383
Grinding (comminution),
Ce-TZP, transformations during (9) 2259
Grinding (material removal),
of PZT, modification of surface texture by (8) 2293
temperatures (10) 2742
Hafnium,
HfO_2, pressure-induced transformation of (4) 844
Hall effect,
in $Y_1Ba_2Cu_3O_x$ (10) 2707
Hardening,
point defect, in MgO-$3Al_2O_3$ (7) 1742
Heat,
treatment, of machinable glass-ceramics to improve mechanical properties (8) 2300
treatments, effect on piezoelectric ceramic-air composites (3) 647
Heating,
frictional, in fiber-reinforced ceramics (4) 929
Homogeneity,
phase, in PZT powders (1) 124
Humidity,
sensor, α-Fe_2O_3, microstructure and properties (3) 546
Hydration,
ball-milling, of highly reactive ß-Ca_2SiO_4 (10) 2779
behavior, of ß-Ca_2SiO_4 (9) 2541
of cement, formation of protective layer during (6) 1669
of ß-dicalcium silicate (2) 353; (2) 359
of germanium oxide carnotite (4) 1035
of portland cement, effect of SiO_2 fume (4) 939
of solid solutions, tricalcium germanate-tricalcium silicate (11) 3070
in systems, Ca_2SiO_4-$Ca_3(PO_4)_2$ (6) 1423
Impurities,
concentration, in alite, effect of MgO and SO_3 (11) 3163
distribution, in AlN (12) 3215
Indentation,
Berkovich and Vickers indenters, comparison of (12) 3299
flaws, short-crack toughness curves using (11) 3049
interaction, effect on cracking (10) 2809
Indium,
In_2O_3, as hot corrosion-resistant stabilizer for ZrO_2 (7) 1818
Infiltration
chemical vapor, reaction and diffusion kinetics—correction (3) 734
processing, of mullite-Al_2O_3 particulate composites (1) 44
Infrared,
absorption coefficients, of SiO_2 glasses (1) 209
Interfaces,
C layer, role in thermal diffusivity-conductivity of SiC fiber-reinforced RBSN matrix composites (2) 334
Cu-Al_2O_3, structure and bond strength of (10) 2756
SiC-Al_4C_3, HREM study (3) 580
brittle bimaterial, indentation test for macroscopic fracture energy of (2) 413
enamel-steel, XRD study (11) 3087
fiber/matrix, debonding, models of (6) 1694
measurement of shear stress at (7) 1914
mica-mica, SiO_2-SiO_2, and mica-SiO_2, fracture and contact adhesion energies of (3) 667
Ions,
Pb, stability in Na_2O-CaO lead silicate glasses (8) 2194
cation, redistribution in ferrospinels (3) 557
impurity, distribution in lithium zinc ferrites, effect of Bi_2O_3 (11) 3065
residual carbonate, concentrations in Bi-Sr-Ca-Cu-O glasses (6) 1658
Iron,
$NiFe_2O_4$, kinetics of precipitation in NiO (8) 2244
Joining,
SiAlON, using composites ß-SiAlON–glass adhesives (9) 2491
composites, SiC-SiC (1) 131
Kaolinite,
thermal peaks, resolution of (7) 2013
Kinetics,
coarsening, in Mg(Ca,Ti,Y)-PSZ (6) 1566
oxidation-reduction, in system Ag-Pd-O (8) 2232
reaction and diffusion, during CVI—correction (3) 734
Laminates,
micro-, by electrophoretic deposition (10) 2907
Lasers,
AlN, laser ablation synthesis of (12) 3465
Liquids,
Ga_2O_3, density of (6) 1656
in systems, NaF-AlF_3-Al_2O_3 (11) 3001
Magnesium oxide,
Ca diffusion in, along high-diffusivity paths (3) 712
Sr and Si diffusion in (12) 3477
ZrO_2, phase selection and partitioning in (4) 946
creep in, Harper-Dorn and power-law (7) 1737
indentation studies, at high temperature (7) 1924

Manganese,
$(La_{1-x}Sr_x)MnO_3$, synthesis of (1) 201
Sr-doped lanthanum manganite, sol-gel synthesis of (4) 964
lanthanum manganite, reaction with YSZ (2) 401
Matrix,
Al_2O_3, with ZrO_2 inclusions, microstructure of (3) 519
α-Al_2O_3–boehmite, extrusion of (3) 575
cracks, distribution of (2) 316
glass, CaMgSiAlO, shape of grains in (1) 216
Measurement,
conductivity, on insulators, minimization of parasitic currents (10) 2795
of creep, in Al_2O_3 with glass phase (6) 1691
grain boundary sliding, during creep of Al_2O_3 (6) 1612
indentation fracture toughness, crack-shape effects for (2) 305
of oxygen and impurity distribution, in AlN (12) 3215
of residual stress, in SiC-reinforced glass composites (8) 2225
in injection-molded ceramics (10) 2773
of shear stress, fiber/matrix interfacial (7) 1914
of stress-induced phase transformation, in MgO-PSZ (6) 1570
Mechanical properties,
of $ZrSiO_4$, sintered (9) 2420
of coatings, SiC (9) 2623
of composites, Al_2O_3-AlN-TiN (8) 2251
SiC fiber-reinforced Si_3N_4, oxidation effects on (2) 406
SiC-fiber-reinforced ZrO_2 titanate (6) 1628
ceramic-matrix (10) 2719
continuous-fiber-reinforced C matrix (11) 3017
laminar ceramic/fiber-reinforced epoxy (11) 2969
laminated 0/90 ceramic/matrix (12) 3321
electro-, of PMN-PT-BT,ST (7) 1964
of glass-ceramics, machinable, improvement by heat treatment (8) 2300
of microstructures, interpenetrating (2) 418
of solid solutions, SiC–AlN (2) 325
Melts,
CaO-Al_2O_3-CrO_x-SiO_2, oxidation state of Cr in (6) 1378
Li_2SiO_3 and Li-bearing, heat capacity of (9) 2601
glass, foaming produced by sodium sulfate decomposition (11) 2959
silicate, activity of nickel(II) oxide in (6) 1490
activity-composition relations of chromium oxide in (6) 1364
spinning, of Al_2O_3 fibers (3) 629
temperature, effect on solidification of liquid garnets $Ln_3Al_5O_{12}$ (Ln=Dy, Y, and Lu) (11) 3166
Membranes,
Al_2O_3, sol-gel preparation of (9) 2613
Metallurgy,
route to superconductors (2) 282
Metals,
wetting and interfacial bonding, with ionocovalent oxides (11) 3118
Microscopy,
HREM, of SiC-Al_4C_3 interface (3) 580
TEM, of dislocations in AlN (4) 873
Migration,
particle, during filtration (10) 2726
Minerals,
fayalite, reduction, role of selected cations and gas speciation (6) 1476
germanium oxide carnotite, hydration of (4) 1035
hillebrandite, synthesis of ß-Ca_2SiO_4 from (9) 2427
silicocarnotite, crystal structures of Cr analogs (6) 1416
Mixtures,
for dry and wet phase equilibrium studies, methods of making (11) 2931
Mobility,
electron, in Al_2O_3, effect of crystal orientation (10) 2790
hole, in acceptor-doped $SrTiO_3$ (6) 1666
Models,
computer, of spinodal decomposition in system TiO_2-SnO_2 (7) 1906
of interfacial debonding, fiber-matrix (6) 1694
ion-packing based on defect clusters, application to ZrO_2 solid solutions (6) 1541; (6) 1550
for kinetics, of solid-state reactions (7) 1949
viscoelastic, for glass, integration of hereditary integrals (8) 2213
for whisker orientation, in SiC whisker-reinforced composites (6) 1522
Molding,
injection, temperature distributions during solidification stage (8) 2260
Molds,
shell, Al_2O_3–SiO_2, glassy phase in (1) 77
Morphology,
of ZrO_2, synthesized from zirconium oxychloride (9) 2515
in donor-doped $BaTiO_3$ (9) 2383
surface, of heat-treated films (9) 2463
Mullite,
-Al_2O_3 composites, by extrusion (4) 953
-Al_2O_3 particulate composites, by infiltration processing (1) 44
and Si_3N_4, SiC whisker-reinforced, comparison of crack growth in (7) 1760
-forming powders, by spray-drying (11) 3154
powders, synthesis of (1) 213
sintered, effect of density on crystallization (12) 3457
structure refinement, by Rietveld method (1) 227
-type structures, in system Al_2O_3-Me_2O (Me=Na,K) and Al_2O_3-B_2O_3 (7) 1929
Niobates,
K Ta, films, effect of sintering on dielectric constant (11) 3007
sol-gel preparation of (6) 1701
PMN, synthesis of (6) 1581
PMN-PT-BT,ST, electromechanical properties (7) 1964
phase transition in (7) 1970
PZN, perovskite, thermodynamic stability of (1) 82
SBN:50 ceramic, preparation and ferroelectric properties (9) 2581
Sr Ba, sol-gel preparation of (6) 1697
Sr pyro- and Ca pyro-, sol-gel synthesis of (10) 2697
Niobium,
Nb_2Al, toughening by combustion synthesis (6) 1678
Nitridation,
of Si, MgO/CeO_2-doped containing SiC whiskers (6) 1662
of SiO_2, with NH_3 (8) 2189
surface, strengthening of SiC by (9) 2586
Nitrides,
AlN, TEM of dislocations (4) 873
effect of dopants on impedance and dielectric properties (11) 3145
measurement of oxygen and impurity distribution (12) 3215
powder, sintering behavior (8) 2098
powders, aerosol synthesis of (12) 3209
sintered, oxidation of (11) 3149
vapor synthesis, thermodynamics of (4) 920
BN, plasma-enhanced CVD of (7) 1985
plasma-enhanced CVD of—correction (10) 2919
synthesis of (1) 240
Si Y oxy-, oxidation behavior (12) 3289
Si oxy-, densified by HIP (1) 62
oxidation behavior (12) 3377
TiN, powder, oxidation and degradation in air (1) 244
Nuclear materials,
ZrC-coated particle fuel, performance in irradiation and heating tests (11) 2985
vitrification, in situ, effect of soil additives (1) 112
waste glass, volatility of (3) 507
wastes, Na-bearing, aging effects on Ce-doped titanate containing (2) 392
durability of glass for (9) 2433
Nucleation,
cone crack, at sharp contacts (10) 2877
in intergranular phase, of SiAlON (1) 249
rate, estimation by DSC (9) 2449
of rutile, during crystallization of TiO_2 (7) 2010
Optical properties,
of Si, CVD, improving (8) 2134
Orientation,
crystal, effect on conductivity and electron mobility in Al_2O_3 (10) 2790
crystal-axis, effect on resonance mode of $BaTiO_3$ (6) 1674
of whiskers, in SiC whisker-reinforced composites, model for (6) 1522
Oxidation,
of AlN, sintered (11) 3149
of Si_3N_4, role of Si_2N_2O (11) 2995
of Si_3N_4-ZrO_2(+Y_2O_3) (1) 28
of SiC-based ceramics, in Ar-2% Cl_2-O_2 (7) 1942
behavior, of Al_2O_3-AlN-TiN composites (8) 2251
of silicon yttrium oxynitride (12) 3289
of silicon oxynitride (12) 3377
effect on mechanical properties, of SiC fiber-reinforced Si_3N_4 (2) 406
inhibition mechanisms, in coated C-C composites (3) 703
kinetics, of HfC (10) 2671
of powders, TiN, in air (1) 244
of rare-earth disilicate Si_2N_4 (8) 2044
resistance, of Al_2O_3-TiN and Al_2O_3-TiC composites (6) 1688
state of Cr, in CaO-Al_2O_3-CrO_x-SiO_2 melts (6) 1378
states of Cr, in system CaO-3CaO-Cr_2O_3 (8) 2184
Oxides,
$Ca_5Cr_3O_{12}$ and $Ca_5Cr_2SiO_{12}$, crystal structures (6) 1416
Co-Fe-Mn mixed, thermodynamic stability of (2) 382
Cr, activity-composition relation in silicate melts (6) 1364
Fe, reactions with Al_2O_3-SiO_2 refractories, editorial comment on paper by Arnulf Muan (6) 1331
Ga_2O_3, density of liquid (6) 1656
HfO_2, pressure-induced phase transformation of (4) 844
$La(Cr_{1-x}Mn_x)O_3$, phase transition study (6) 1685
Nb and Ta, sols for lasers, stabilization and characterization of (8) 2289
Ni(II), activity in silicate melts (6) 1490
distribution, in thermally decomposed ZrF_4·H_2O (7) 1918
heavy-metal, glasses (9) 2315
ionocovalent, wetting of interfacial bonding of metals with (11) 3118
metal, particles, crystallization of (4) 1029
mixed-cation powders, preparation of (12) 3490
particles, SiO_2, Al_2O_3, and $3Al_2O_3$·$2SiO_2$, formation of (1) 117
Oxygen,
effect on formation, of aluminum silicon carbide (1) 224
fugacity control, in nonflowing atmosphere (2) 369; (2) 375
Particles,
6H-SiC, in Al_2O_3/SiC composites, analysis of residual stress in (7) 1854
SiO_2, Al_2O_3, and $3Al_2O_3$·$2SiO_2$, formation of (1) 117
TiO_2, alkoxide-derived (6) 1587
boehmite, synthesis of (9) 2615
metal oxide, crystallization of (4) 1019
migration, during filtration, analysis of (10) 2726
nanosize, fabrication of transparent Si_3N_4 from (12) 3283
nonspherical, packing of mixtures of (10) 2765
size, effect on thermal conductivity of particulate-SiC-reinforced Al matrix composites (11) 3137
Perovskites,
$Ba(Zn_{1/3}Ta_{2/3})O_3$, dielectric loss at microwave frequencies (9) 2573
segregation in, interfacial—comment (7) 2017
interfacial—reply to comment (7) 2020
Phase equilibria,
dry and wet studies, methods of making mixtures for (11) 2931
and floating zone crystal growth (6) 1440
systems, Ag-Pd-O (8) 2232
Al-Li-O (6) 1484
CaO-$CaCr_2O_4$-$CaAl_2O_4$ (6) 1463
CaO-CrO-Cr_2O_3-SiO_2 (6) 1333
CaO-ZrO_2 (3) 731; (3) 733
CoO-MgO-SiO_2, tie lines and activities in (11) 3081
HfO_2-Y_2O_3-CaO (11) 3026
MgO-V_2O_5-SiO_2 (10) 2874
Nd-B-N, Sm-B-N, and Gd-B-N (10) 2825
$NdCl_3$-NaCl, $NdCl_3$-$CaCl_2$, $PrCl_3$-NaCl, and $PrCl_3$-$CaCl_2$ (9) 2484
Sr-Cu-O (10) 2833
iron oxide-NiO-SiO_2 under reducing conditions (6) 1351
Phases,
condensed, in system Sr-Cu-O, thermodynamics of (12) 3225
crystalline, of ß″-Al_2O_3-based solid electrolyte (1) 52
evolution, during autoclaving of aerated concrete (7) 1858
glassy, in Al_2O_3–SiO_2 shell molds (1) 77
grain-boundary, creep due to (9) 2327
intergranular, in SiAlON, nucleation in (1) 249
relationships, in system CaO-P_2O_5-H_2O (1) 17
selection, in ZrO_2-MgO (4) 946
separation, in 12 mol% CeO_2-doped ZrO_2, induced by heat treatment (10) 2843
in alkali borosilicate glass (4) 1026
in system SiC-AlN (4) 809
in systems, $ZrTiO_4$-$Zr_5Ti_7O_{24}$, structure of (3) 563
tetragonal, of MgO-PSZ, pro- and subeutectoid behavior of (2) 463
transformation, in Ca_2SiO_4 (9) 2400; (9) 2413
Phosphates,
Ca, cements, prepared by acid-base reaction (8) 2076
Physical properties,
of composites, B_4C-BN (4) 864
of films, in system $AlPO_4$-TiO_2 (9) 2335
Piezoelectric materials,
composites, PZT fiber/polymer (6) 1648
Piezoelectricity,
in antiferroelectrics, lead zirconate-based (4) 795
Polishing,
SiC, with chromium(III) oxide (1) 189
Porcelain,
for tableware, effect of firing temperature on bending strength (7) 1801
Pores,
of Al_2O_3, segregation of Mg to (7) 1796
large, densification of (9) 2498
locations, in sintered Al_2O_3, frequency of (9) 2599
size distribution, relation to fracture strength of Si_3N_4 (8) 2116
Porous materials,
thermal conductivity, gas pressure and temperature dependence (12) 3425
Powders,
Ag-$YBa_2Cu_3O_{7-x}$, by sol-gel process (7) 1975
Al_2O_3, laser ablation synthesis of (12) 3293
AlN, aerosol synthesis (12) 3209
sintering behavior (8) 2098
ß-BaB_2O_4, sol-gel preparation (9) 2590
$MgAl_2O_4$, preparation of (8) 2240
PZT, phase homogeneity and segregation in (1) 124
ß-SiC, production of (1) 170
TiN, oxidation and degradation in air (1) 244
TiO_2, dopants in vapor-phase synthesis of (12) 3408
compact, pore structure of (12) 3498
compaction of, cyclic (11) 3157
cordierite, alkoxide-derived, effects of precursors on (1) 153
metal chromite, combustion synthesis of (4) 1012
mixed-cation oxide, preparation of (12) 3490
mullite, synthesis of (1) 213
mullite-forming, by spray-drying (11) 3154
Precipitation,
of $NiFe_2O_4$, in NiO (8) 2244
Precursors,
aluminosilicate, Al_2O_3-SiC composites from (8) 2283
poly(methacrylate), to forsterite (7) 1831
Pressing,
HIP, of Si_3N_4–SiO_2 composites, densification during (1) 195
Y α-SiAlON by (2) 432
of porous Al_2O_3 (8) 2165
of translucent Al_2O_3 (2) 469
HIPing, of ZrO_2-toughened bioactive glass-ceramic composite (5) 1103

method, effect on organic burnout in Y-TZP (9) 2627
Pressure,
constant-pressure lines, Gruneisan relation on (12) 3341
effect on permittivity, of $BaTiO_3$ (11) 2926
gas, effect on thermal conductivity of porous materials (12) 3425
vapor, Bi, Pb, and Cu in $Bi_2Sr_{1.7}CaCu_2O_y$ and $Bi_{1.7}Pb_{0.3}Sr_{1.7}Ca_2Cu_3O_y$ (4) 805
Pyroelectricity,
in PZN-BT-PT (8) 2155
Quartz,
nucleation, in lithium aluminosilicate glass, effect of dopants (7) 1958
Reactions,
of iron oxides, with Al_2O_3-SiO_2 refractories, editorial comment on paper by Arnulf Muan (6) 1331
of lathanum manganite, with YSZ (2) 401
of SiC and SiO_2, at elevated temperatures (6) 1603
of crack in glass matrix, with inclined fiber (11) 3172
exothermic, properties of ceramics made by (1) 36
solid-state, model for kinetics of (7) 1949
Reduction,
of fayalite, role of selected cations and gas speciation (6) 1476
Refractories,
Al_2O_3-SiO_2, effect of Cr_2O_3 on slag resistance (10) 2857
reactions with iron oxides, editorial comment on paper by Arnulf Muan (6) 1331
lining, for Al_2O_3 electrolytic cells (8) 2308
systems, Al-Li-O, phase relations in (6) 1484
Relaxation,
dielectric, of $BaTiO_3$, temperature dependence (11) 2939
ultraslow dielectric, of doped $BaTiO_3$ (9) 2379
Resistivity, electrical,
of lithium zinc ferrites, effect of Bi_2O_3 impurity (11) 3065
PTC effect, in graphite-cristobalite composites (7) 1772
Resistors, electrical,
conductivity measurements, minimization of parasitic currents (10) 2795
Resonance,
mode, of $BaTiO_3$, effect of crystal-axis orientation (6) 1674
Rheology,
of Al_2O_3, porous (8) 2165
Rutile,
nucleation, during crystallization of TiO_2 (7) 2010
Sapphire,
Mg- and Ca-ion-implanted, healing of cracklike flaws in (9) 2547
fibers, in TiAl and glass, effect of fiber roughness on sliding (12) 3358
shock-loaded, slip and basal twinning in (12) 3252
Seals and sealing,
glass-to-metal, anodic bonding for (10) 2644
Segregation,
of Mg, to pores of Al_2O_3 (7) 1796
interfacial, in perovskites—comment (7) 2017
in perovskites—reply to comment (7) 2020
Selenides,
InSe, crystals, thermal processing in S vapor (4) 854
Semiconductors,
property, of Al_2O_3-SiC whisker composites (8) 2286
Sensors,
CO and H, by anatase modification of TiO_2 (11) 2964
CO_2, CuO-$BaTiO_3$ capacitor as (3) 613
humidity, α-Fe_2O_3, microstructure and properties (3) 546
Separation,
secondary-phase, in alkali borosilicate glass (4) 1026
Shock resistance,
thermal, of open-cell ceramic foams (7) 1899
Shock,
thermal, damage, ultrasonic assessment of (7) 1839
Shrinkage,
aging, in tape-cast green sheets, explanation of (9) 2373
SiAlONs,
Y α-, by HIP (2) 432
ceramics (2) 259
ceramics—correction (8) 2312
grain growth, exaggerated texture and (10) 2733
intergranular phase, nucleation in (1) 249
joining, using composites ß-SiAlON–glass adhesives (9) 2491
Silicates,
Ca_2SiO_4, solid solutions with Ba concentration, structure of (4) 884
ß-Ca_2SiO_4, highly reactive (10) 2779; (9) 2541
phase transformations in (9) 2400; (9) 2413
synthesis from hillebrandite (9) 2427
$ZrSiO_4$, sol-gel preparation of (9) 2420
alkali, thermodynamic properties (9) 2601
calcium hydrate, growth on calcium germanate hydrate (9) 2619
ß-dicalcium, highly reactive (2) 353; (2) 359
stabilization of #8γ transformation in (6) 1621
magnesium hydrate, composition and appearances, effect on deterioration of cement (10) 2904
melt, activity-composition relations of chromium oxide in (6) 1364
melts, activity of nickel(II) oxide in (6) 1490
Silicides,
$MoSi_2$, fracture modes in (6) 1682
processing temperature effects on (11) 3160
Silicon,
CVD, improving optical properties of (8) 2134
from silane and chlorinated silanes (3) 619
MgO/CeO_2-doped containing SiC whiskers, nitridation of (6) 1662
Silicon carbide,
6H α-, creep of (12) 3421
He bubbles in, deformation by stress-induced transport of (1) 237
and SiO_2, reactions at elevated temperatures (6) 1603
α-, grain boundary sliding and dislocation glide in creep of (7) 1786
ß-, powders, production of (1) 170
-based ceramics, oxidation in Ar-2% Cl_2-O_2 (7) 1942
coating, composition and mechanical properties (9) 2623
corrosion, in N_2-H_2-CO gases (12) 3257 ; (12) 3268
crystals, polishing with chromium(III) oxide (1) 189
deposition, from methyltrichlorosilane, depletion effects of (10) 2899
diffusion-bonded, effects of joining pressure and deformation on strength and microstructure (3) 725
siliconized, effect of microstructure on creep of (7) 1822
strengthening, by surface nitridation during HIP (9) 2586
tubes, exposed to combustion gases, strength of (12) 3445
siliconized, subjected to creep rupture, life of (2) 424
whiskers, fabrication and fracture behavior (6) 1558
nitridation of MgO/CeO_2-doped Si containing (6) 1662
Silicon dioxide,
C_{70}-doped solid gel, by sol-gel processing (10) 2865
and SiC, reactions at elevated temperatures (6) 1603
charge distribution in, effect of applied strain (11) 3097
confined in Si particles, sintering (4) 999
fibers, effect of NaCl solutions on strength and fatigue of (2) 364
fume, effect on hydration of portland cement (4) 939
gel, apatite formation induced by (8) 2094
glass, ir absorption coefficients (1) 209
nitridation, with NH_3 (8) 2189
-polymer gel, X-ray scattering study (4) 971
vitreous, Fourier analysis of X-ray patterns of (1) 11
Silicon nitride,
CVD, role of Si_2N_2O in oxidation of (11) 2995
from silane and chlorinated silanes (3) 619
SiC whisker-reinforced, crack growth in (7) 1760
α-, CVD from SiF_4 and NH_3 (8) 2200; (10) 2803
microstructural development during gas-pressure sintering (1) 103
delayed failure resistance of (4) 1023
doped with Sc_2O_3, deformation and microstructural analysis for (12) 3331
fracture strength, relation to pore size distribution (8) 2116
friction and wear, in reactive environments (11) 3033
preparation of, carbothermal (3) 532
rare-earth disilicate-, fabrication and crystallization of (8) 2037
oxidation behavior (8) 2044
strength and creep behavior (8) 2050
reaction-bonded, formation of (3) 677
reinforced, *R*-curve behavior (7) 1777
static-fatigue life, in corrosive environment (3) 719
strength, effect of stress heterogeneity on (3) 700
strength and creep-fatigue behavior, evaluation of (9) 2453
texture and anisotropy in (7) 1748
toughened with 8 wt% Sc_2O_3, estimation of crack closure stresses in (6) 1508
transparent, fabrication from nanosize particles (12) 3283
Silver,
Ostwald ripening in glass, effect of additives (10) 2910
effect of temperature (8) 2071
Sintering,
Ce-TZP (3) 552
SiO_2, confined in oxidized Si particles (4) 999
ZrO_2, monoclinic, tetragonal, and cubic (8) 2173
behavior, of AlN powder (8) 2098
composites, SiC-TiB_2 (9) 2479
ceramic particulate (8) 2056; (8) 2066
gas-pressure, of α-Si_3N_4, microstructural development during (1) 103
microwave, of SOFC (2) 341
reaction, of polycarbosilane-impregnated SiC hollow particles—correction (2) 479
silicon oxynitride (1) 62
two-stage, of PLZT from powders (9) 2520
whiskers, aluminum borate (12) 3452
Slags,
Sb-containing glass-ceramics, crystallization of (2) 440
activation, by alkali-metal and alkaline-earth hydroxides (12) 3233
resistance, of Al_2O_3-SiO_2 refractories, effect of Cr_2O_3 (10) 2857
Slips,
Al_2O_3, reformulation of (2) 290
Sodium,
-bearing nuclear wastes, aging effects on Ce-doped titanate containing (2) 392
Sol-gel process,
of $Ba(Mg_{1/3}Ta_{2/3})O_3$ (12) 3337
of potassium tantalate niobate (6) 1701
of strontium barium niobate (6) 1697
of strontium pyroniobate and calcium pyroniobate (10) 2697
of TZP, gels, powders, and films (11) 3091
of gels, C_{70}-doped solid SiO_2 (10) 2865
of membranes, Al_2O_3 (9) 2613
of powders, Ag-$YBa_2Cu_3O_{7-x}$ (7) 1975
$ZrSiO_4$ (9) 2420
of solid solutions, $KTaO_3$ and $KNbO_3$ (8) 2125
Solid state,
reactions, model for kinetics of (7) 1949
Solidification,
of liquid garnet $Ln_3Al_5O_{12}$ (Ln=Dy, Y, and Lu), effect of melt temperature (11) 3166
stage in injection molding, temperature distribution during (8) 2260
Solids,
Gruneisen relation, on constant-pressure lines (12) 3341
in systems, NaF-AlF_3-Al_2O_3 (11) 3001
Sols,
editorial comments, on a paper by Rustum Roy (11) 2933
niobium and tantalum oxide, for lasers, stabilization and characterization of (8) 2289
Solutions,
NaCl, effect on strength of SiO_2 fibers (2) 364
aqueous, formation of fluorapatitie in (12) 3401
Solutions, solid,
C-B-N, characterization of (1) 161
$CaMgSi_2O_6$-$CaNiSi_2O_6$, stability of $CaNiSi_2O_6$ in (6) 1458
Ca_2SiO_4 with Ba concentration, structure change of (4) 884
$FeCr_2O_4$-$FeAl_2O_4$ and $MnCr_2O_4$-$MnAl_2O_4$, activity-composition relations in (6) 1407
$KTaO_3$ and $KNbO_3$, by sol-gel processing (8) 2125
$NiAl_2O_4$-$MnAl_2O_4$, activity-composition relations in (6) 1399
PZN-BT-PT, pyroelectric and electrostrictive properties (8) 2155
SiC–AlN, microstructure and mechanical properties (2) 325
ZrO_2, ion-packing model based on defect clusters (6) 1541; (6) 1550
systems, Cr_2O_3-Al_2O_3, activity-composition relations in (6) 1412
KZP-KTP, thermal expansion of (8) 2276
tricalciu:n germanate-tricalcium silicate, hydration of (11) 3070
Spectra,
impedance, of Al_2O_3-SiC whisker composites (8) 2286
Spectroscopy,
XPS, of metallic diborides (10) 2849
Spinels,
$MgAl_2O_4$, transparent, fracture mechanisms (12) 3440
MgO·$3Al_2O_3$, point defect hardening in (7) 1742
ferro-, cation redistribution in (3) 557
powders, $MgAl_2O_4$, preparation of (8) 2240
Stability,
of $CaNiSi_2O_6$, in $CaMgSi_2O_6$-$CaNiSi_2O_6$ solid solutions (6) 1458
of Pb ion, in Na_2O-CaO lead silicate glasses (8) 2194
of solid solutions, $NiAl_2O_4$ and $MnAl_2O_4$ (6) 1399
of suspensions, $BaTiO_3$, with polyacrylic acid (12) 3201
thermodynamic, of Co-Fe-Mn mixed oxides (2) 382
of perovskite PZN (1) 82
Stabilization,
of ß+γ transformation, in dicalcium silicate (6) 1621
of sols, niobium and tantalum oxide (8) 2289
Strain,
applied, effect on charge distribution in SiO_2 (11) 3097
electric field induced, in PLZT (6) 1534
stress- behavior, of duplex ceramics (7) 1729
Strength,
of Si_3N_4 (9) 2453
R-curve behavior (7) 1777
effect of stress heterogeneity (3) 700
of SiC, diffusion-bonded, effects of joining pressure (3) 725
bending, of (Mg,Ca)-PSZ (3) 694
of porcelain for tableware, effect of firing temperature (7) 1801
bond, of Cu-Al_2O_3 interface (10) 2756
fracture, of Si_3N_4–BN composites (1) 67
of Si_3N_4, relation to pore size distribution (8) 2116
comparison of Berkovich and Vickers indenters (12) 3299
improved, SiC-TiB_2 composites with (9) 2479
after subcritical crack extension (11) 3133
of glass, effect of subsurface flaws by scribing (9) 2565
of glass bottles, as affected by limitation of manufacturing processes (10) 2635
of glasses, low-earth-orbit effects on (10) 2893
high-temperature of Si_3N_4–SiO_2 composites (1) 148
of rare-earth disilicate-Si_3N_4 (8) 2050
tensile, of 9/90 CAS matrix composites (12) 3321
toughness-curves, using indentation flaws (11) 3049
transformation, effect of stress terms (10) 2761
of tubes, SiC exposed to combustion gases (12) 3445
of whisker-reinforced ceramics, effect of temp. (4) 786
Strengthening,
Nb_2Al, in situ, by combustion synthesis (6) 1678
of SiC, by surface nitridation during HIP (9) 2586
composites, laminated (12) 3396
Stresses,
crack closure, estimation for Si_3N_4 toughened with 8 wt% Sc_2O_3 (6) 1508
distributions, in composites containing faceted inclusions (7) 1807
heterogeneity, effect on strength of Si_3N_4 (3) 700
residual, in SiC-reinforced glass composites, measurement of (8) 2225
in injection-molded ceramics, measurement of (10) 2773
shear, at fiber/matrix interface, measurement of (7) 1914

-strain behavior, of Al_2O_3, for different Mg-PSZ grades (11) 3058
of duplex ceramics (7) 1729
-strain relations, in optical fibers (10) 2692
terms, effect on transformation toughness (10) 2761
Structure, micro-,
of La^{3+}-doped M-type calcium ferrite, changes of (4) 915
of (Mg,Ca)-PSZ (3) 694
of Sc_2O_3-doped Si_3N_4 (12) 3331
of Si_3N_4-ZrO_2(+Y_2O_3) (1) 28
of SiC, diffusion-bonded, effects of joining pressure (3) 725
of ZnO, with Cu additive (12) 3363
of compacts, diamond (1) 253
of composites, Al_2O_3(CeO_2), effect of aqueous processing (10) 2649
ß-Si_3N_4 whisker-reinforced Si_3N_4 (10) 2713
ZrB_2 platelet-reinforced ZrC_x (8) 2139
development, of TiN-reinforced Si_3N_4/silicon oxynitride composites (11) 2945
during gas-pressure sinterng of α-Si_3N_4 (1) 103
effect on creep, of siliconized SiC (7) 1822
interpenetrating, mechanical properties of (2) 418
interpenetrating phase composites (4) 739
of sensors, α-Fe_2O_3 humidity (3) 546
of solid solutions, SiC–AlN (2) 325
of substrates, W-metallized high-Al_2O_3 (10) 2815
Structure,
of Ca_2SiO_4, solid solutions with Ba concentrate (4) 884
crystal, of $Ba(Zn_{⅓}Ta_{⅔})O_3$-$(Sr,Ba)(Ga_{½}Ta_{½})O_3$ (7) 1767
of $Ca_5Cr_3O_{12}$ and $Ca_5Cr_2SiO_{12}$ (6) 1416
of glass, comments on papers by B. E. Warren (1) 16
of glass surfaces, sodium aluminosilicate (9) 2353
of glasses, Na_2O-Y_2O_3-SiO_2 (12) 3278
X-ray determination (1) 5
alkali tellurite (2) 277
high permittivity, in fine-grained $BaTiO_3$ (11) 2923
instability, of La^{3+}-doped M-type Ca ferrite (4) 915
of interface, Cu-Al_2O_3 (10) 2756
lattice constants, of B_4C (8) 2207
of phases, in system $ZrTiO_4$-$Zr_5Ti_7O_{24}$ (3) 563
pore, of powder compacts (12) 3498
refinement, of mullite, by Rietveld method (1) 227
Substrates,
Cu-bonded Al_2O_3, thermally induced failure of (12) 3353
W-metallized high-Al_2O_3, microstructure of (10) 2815
Sulfides,
CaS, Y substitution in (7) 1988
Superconductors,
123, preparation using microwaves (7) 1990
Ag-$YBa_2Cu_3O_{7-x}$, powders, by sol-gel process (7) 1975
Ba-Y-Gd-Cu-O, effect of composition on properties (9) 2390
$Bi_{1.4}Pb_{0.6}Sr_2Ca_2Cu_{3.6}O_y$, compact swelling in (3) 570
$Bi_2Sr_{1.7}CaCu_2O_y$ and $Bi_{1.7}Pb_{0.3}Sr_{1.7}Ca_2Cu_3O_y$, vapor pressures of Bi, Pb, and Cu (4) 805
$(Bi,Pb)_2Sr_2Ca_2Cu_3O_x$, Ba-doped, properties of (7) 1864
Bi-Pb-Sr-Ca-Cu-O, characterization of (1) 96
Bi-Sr-Ca-Cu-O glasses, concentration of residual carbonate ions in (6) 1658
$Y_1Ba_2Cu_3O_x$, Hall effect and charge carrier generation in (10) 2707
$YBa_2Cu_3O_7$ and $LaBa_2Cu_3O_7$, thermogravimetry and evolved-gas analysis of (6) 1705
$YBa_2Cu_3O_{7-x}$, CVD of (10) 2679
cuprates, use in oxygen concentration cells (6) 1434
films, Bi-Pb-Ca-Sr-Cu-O, dopants in (1) 231
$YBa_2Cu_3O_{7-x}$, preparation of (8) 2268
metallurgical route to (2) 282
wire, by green-fiber method (4) 903
Surface,
anatase TiO_2 area reduction, in mixture of HCl, H_2O, and O_2 (3) 657; (3) 663
fracture, fractal characteristics of (10) 2687
glass, sodium aluminosilicate, structure of (9) 2353
morphology, of heat-treated films (9) 2463
Suspensions,
Al_2O_3, flocculated, consolidation behavior (12) 3305
$BaTiO_3$, stabilization with polyacrylic acid (12) 3201
Swelling,
compact, in $Bi_{1.4}Pb_{0.6}Sr_2Ca_2Cu_{3.6}O_y$ (3) 570
Synthesis,
of cBN (1) 240
ß-Ca_2SiO_4, from hillebrandite (9) 2427
of $La_{1-x}Ba_xCuO_4$, defect-chemistry aspects (7) 1993
of $(La_{1-x}Sr_x)MnO_3$ (1) 201
of $MgTi_2O_5$ (7) 1978
of PMN (6) 1581
of $Sr(Cu_xZn_{1-x})_{½}W_{½}O_3$ (1) 234
aerosol, of AlN powders (12) 3209
of aluminum borate (9) 2605
carbothermal, of Si_3N_4 (3) 532
carbothermal reduction, of B_4C (9) 2509
of ceramics, made by exothermic reactions (1) 36
combustion, of metal chromite powders (4) 1012
temperature profile analysis (1) 175; (1) 180
of composites, Al_2O_3–metal (10) 2749
of cordierite, grinding effects on (9) 2535; (9) 2535
of cristobalite, chemically stabilized (1) 89
of films, oriented PZT (10) 2785
laser ablation, of Al_2O_3 powder (12) 3293
of AlN (12) 3465
of particles, boehmite (9) 2615
of powders, mullite (1) 213
sol-gel, of CdTe-microcrystal-doped SiO_2 glasses (1) 220
of Sr-doped lanthanum manganite (4) 964
vapor, of AlN, thermodynamics of (4) 920
Systems,
$A(B^{2+}B^{5+})O_3$ and $A(B^{3+}B^{6+})O_3$, relationship between doping and ordering (10) 2881
Ag-Pd-O, oxidation-reduction kinetics (8) 2232
Al_2O_3-Me_2O (M=Na and K) and Al_2O_3-B_2O_3, mullite-type structures in (7) 1929
Al-Li-O, phase relations in (6) 1484
$AlPO_4$-TiO_2, properties of films in (9) 2335
Ba-Y-Gd-Cu-O, effect of composition on superconducting properties (9) 2390
Ca_2SiO_4-$Ca_3(PO_4)_2$, hydration in (6) 1423
CaO·3CaO·Cr_2O_3, determination of Cr oxidation states in (8) 2184
CaO-$CaCr_2O_4$-$CaAl_2O_4$, in air (6) 1463
CaO-CrO-Cr_2O_3-SiO_2, phase relations in (6) 1333
CaO-MnO and MgO-MnO, activity-composition relations in (6) 1472
CaO-P_2O_5-H_2O, phase relationships in (1) 17
CaO-ZrO_2, phase diagram of (3) 731; (3) 733
phase diagram revisited—correction (6) 1712
$Co_xFe_{3-x}O_4$, grain-boundary and bulk electrical resistance in (6) 1708
CoO-MgO-SiO_2, tie lines and activities in (11) 3081
(Fe,Co)-$(Fe,Co)_3O_4$, equilibrium studies of (6) 1452
FeO-NiO-Fe_2O_3-SiO_2, liquid-solid equilibria in (6) 1342
HfO_2-Y_2O_3-CaO, phase equilibria (11) 3026
KZP-KTP, thermal expansion of solid solutions in (8) 2276
$La_{1-x}Na_xCo_{1-x}Nb_xO_3$, electrical properties (11) 3141
$La(Cr_{1-x}Mn_x)O_3$, phase transition study of (6) 1685
M-Co-O (M=Ta and Nb, thermogravimetric study of (6) 1447
MgO-Al_2O_3, thermodynamic assessment of (6) 1497
MgO-FeO-Fe_2O_3-Al_2O_3-Cr_2O_3-SiO_2, spinel-silicate equilibria in (6) 1390
MgO-V_2O_5-SiO_2, phase equilibria (10) 2874
Na_2O-B_2O_3-Al_2O_3, glass-forming ability and crystallization tendency (11) 3129
Na_2O-Y_2O_3-SiO_2, glass-formation in (12) 3278
NaF-AlF_3-Al_2O_3, solids and liquids in (11) 3001
Nd-B-N, Sm-B-N, and Gd-B-N, phase relations in (10) 2825
$NdCl_3$-NaCl, $NdCl_3$-$CaCl_2$, $PrCl_3$-NaCl, and $PrCl_3$-$CaCl_2$, phase equilibria (9) 2484
NiO-TiO_2, equilibria relations in (6) 1357
NiO-TiO_2-SiO_2, liquid-solid equilibria in (6) 1382
SiC-AlN, phase separation in (4) 809
SiO_2-aluminum orthophosphate, properties of films in (12) 3417
Sr-Cu-O, thermodynamics and phase equilibria (10) 2833
thermodynamics of condensed phases in (12) 3225
TiO_2-SnO_2, computer simulation of spinodal decomposition in (7) 1906
$Y_4Al_2O_9$ and Y_2O_3, eutectic composition in (7) 2006
Y-Ba-Cu-C-O-H, thermodynamics of (10) 2679
ZrO_2-CaO, thermodynamic calculation of (11) 3040
$ZrTiO_4$-$Zr_5Ti_7O_{24}$, structure of phases in (3) 563
iron oxide-NiO-SiO_2, under reducing conditions (6) 1351
Tellurides,
CdTe, SiO_2 glasses doped with (1) 220
Temperature,
dependence, of dielectric relaxation of $BaTiO_3$ (11) 2939
distribution, during solidification stage in injection molding (8) 2260
effect on Ostwald ripening of Ag, in glass (8) 2071
effect on strength and modulus, on whisker-reinforced ceramics (4) 786
grinding (10) 2742
inversion, of Sb_2O_3-doped $BaTiO_3$, determination of (3) 587
processing, effects on $MoSi_2$ (11) 3160
Testing,
creep, tensile (8) 2304
Tests,
fiber bundle pushout (11) 3169
indentation, on MgO at high temperature (7) 1924
for fracture energy of brittle bimaterial interfaces (2) 413
for slow crack growth resistance (4) 772
for thermomechanical properties, of fibers (1) 136
ultrasonic, for thermal shock damage in ceramics (7) 1839
Texture,
in Si_3N_4 (7) 1748
exaggerated, and grain growth in SiAlON (10) 2733
surface, of PZT, modification by grinding (8) 2293
Thermal properties,
diffusivity-conductivity, of SiC fiber-reinforced RBSN matrix composites, role of C layer interface (2) 334
expansion anisotropy, of Ce-TZP (10) 2828
shock behavior, of Si_3N_4–BN composites (1) 67
of open-cell ceramic foams (7) 1899
Thermodynamics,
activity-composition relations, in $FeCr_2O_4$-$FeAl_2O_4$ and $MnCr_2O_4$-$MnAl_2O_4$ solid solutions (6) 1407
in system Cr_2O_3-Al_2O_3 (6) 1412
in systems CaO-MnO and MgO-MnO (6) 1472
properties, of alkali silicates (9) 2601
of condensed phases in system Sr-Cu-O (12) 3225
of systems, MgO-Al_2O_3 (6) 1497
Sr-Cu-O (10) 2833
Y-Ba-Cu-C-O-H (10) 2679
ZrO_2-CaO (11) 3040
of vapor synthesis, of AlN (4) 920
Titanates,
Al, enhanced densification by seeding (6) 1529
Al_2TiO_5, formation in Al_2O_3/TiO_2 composites (12) 3473
Cu-doped, containing Na-bearing nuclear wastes, aging effects on (2) 392
$MgTi_2O_5$, synthesis of (7) 1978
PLZT, electric field induced strain in (6) 1534
transparent, fabrication from powders (9) 2520
PMN-PT-BT,ST, electromechanical properties (7) 1964
phase transition in (7) 1970
PZT, films on Ni-Ti shape memory alloys (10) 2891
gels, powders, and films, sol-gel preparation of (11) 3091
modification of surface texture by grinding (8) 2293
oriented films, synthesis of (10) 2785
phase characterization (8) 2088
powders, phase homogeneity and segregation in (1) 124
$SrTiO_3$, acceptor-doped, hole mobility in (6) 1666
Titanium carbide,
reaction-synthesized, densification by forging (3) 592
Titanium dioxide,
anatase modification, CO and H detection by (11) 2964
anatase surface area reduction, in mixture of HCl, H_2O, and O_2 (3) 657; (3) 663
crystallization, nucleation of rutile during (7) 2010
particles, alkoxide-derived (6) 1587
powders, dopants in vapor-synthesis of (12) 3408
Transformations,
anatase-rutile, effect of Cl atmosphere (11) 2934
ß+γ, stabilization in dicalcium silicate (6) 1621
behavior, of Al_2O_3-ZrO_2(CeO_2) composites, effect of aqueous processing (10) 2649
of Ce-TZP (12) 3495
crack-tip zones, in annealed ZrO_2, recovery of (2) 474
grain-size-dependent, in TZP (3) 493
during grinding, of Ce-TZP (9) 2259
phase, in Ca_2SiO_4 (9) 2400; (9) 2413
pressure-induced, in HfO_2 (4) 844
stress-induced, measurement in MgO-PSZ (6) 1570
thermal, of χ-Al_2O_3 (9) 2597
toughness, effect of stress terms on (10) 2761
zone shape, effect on crack shielding in Ce-TZP-Al_2O_3 composites (11) 2991
Transitions,
phase, in PMN-PT-BT,ST (7) 1970
Transparent materials,
Si_3N_4, fabrication of (12) 3283
Transport,
stress-induced, of He bubbles in SiC, deformation by (1) 237
Tubes,
Al_2O_3, fracture under tension/torsion (4) 896
SiC, exposed to combustion gases, strength of (12) 3445
siliconized, subjected to creep rupture, life of (2) 424
Tungstates,
$Sr(Cu_xZn_{1-x})_{½}W_{½}O_3$, synthesis of (1) 234
Uranium,
UO_2, ZrC-coated particles, performance in irradiation and heating tests (11) 2985
oxycarbide, effect of water vapor on release of fission gases (3) 686
Vapors,
K, corrosion of Al_2O_3 by (1) 109
water, effect on release of fission gases from uranium oxycarbide (3) 686
Varistors,
ZnO, prebreakdown conduction in (4) 800
ZnO-glass, phase identification and electrical properties (6) 1636
Viscosity,
increase, in phase-separated borosilicate glasses, origin of (11) 3103
Vitreous materials,
SiO_2 and B_2O_3, Fourier analysis of X-ray patterns of (1) 11
Vitrification,
of nuclear wastes, effects of soil additives (1) 112
Volume,
molar, of rare-earth aluminosilicate glasses (3) 503
Wastes,
nuclear, depth profiling of glasses after burial in salt geology (10) 2702
durability of glass for (9) 2433
Water,
content, effect on properties of sodium aluminosilicate glasses (4) 878
Waves,
failure, in glass (4) 1002
micro-, preparation of 123 superconductors using (7) 1990
sintering of SOFC (2) 341
Wear,
of Si_3N_4, in reactive environments (11) 3033
Wires,
superconducting, by green fiber method (4) 903
X-rays,
patterns, of vitreous SiO_2 and B_2O_3, Fourier analysis (1) 11
Yttrium,
Y_2O_3, high-density (3) 709
layers for corrosion resistance (4) 1005
substitution, in CaS (7) 1988
Zeolites,
formation, in class F fly ash cement pastes (6) 1574
Zinc oxide,
Al-doped films, by CVD (12) 3469

with Cu additive, microstructure and electrical properties (12) 3363
-Sb_2O_3, chemistry of basal plane defects (11) 3127
-glass varistors, phase identification and electrical properties (6) 1636
grain growth, during Bi_2O_3 sintering (9) 2529
varistors, prebreakdown conduction in (4) 800
Zircon,
formation, enthalpy of (6) 1430
Zirconates,
Pb, antiferroelectric based on (4) 795
Zirconium dioxide,
Ce-TZP, sintering (3) 552
static-fatigue life in corrosive environment (3) 719
thermal expansion anisotropy of (10) 2828
transformation behavior (12) 3495
transformations during grinding (9) 2259
In_2O_3 as hot corrosion-resistant stabilizer for (7) 1818
Mg(Ca,Ti,Y)-PSZ, coarsening kinetics in (6) 1566
(Mg,Ca)-partially-stabilized, microstructure and bending strength (3) 694
-MgO, phase selection and partitioning in (4) 946
MgO-PSZ, measurement of stress-induced phase transformation in (6) 1570
pro- and subeutectoid behavior of tetragonal phase (2) 463
TZP, grain-size-dependent transformation behavior (3) 493
-Y_2O_3, grain boundary migration induced by MgO (10) 2659
Y_2O_3-doped, effect of entrapped gas on fast firing (3) 716
Y-TZP, effect of pressing method on organic burnout (9) 2627
YSZ, reaction with lanthanum manganite (2) 401
annealed, recovery of crack-tip transformation zones in (2) 474
12 mol% CeO_2-doped, phase separation induced by heat treatment (10) 2843
monoclinic, deformation twinning in (8) 2302
monoclinic, tetragonal, and cubic, sintering and characterization of (8) 2173
solid solutions, ion-packing model based on defect clusters (6) 1541; (6) 1550
stabilized, microwave thermal etching of (12) 3462
synthesized from zirconium oxychloride, morphology of (9) 2515
-toughened glass-ceramics, bioactivity of (7) 1884